MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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INTRODUCTION.

The Summary for the year 1895 is based upon data received from about 3,000 stations occupied by regular and voluntary observers of the Weather Bureau, Canadian data received by the cooperation of Prof. R. F. Stupart, and Mexican data received from the Directors of observatories in that country. The statistical tables have been generally prepared by the Division of Records and Meteorological Data, A. J. Henry, Chief of Division. The text and editorial work is by Prof. Cleveland Abbe unless otherwise specifically noted.

GENERAL CLIMATIC CONDITIONS.

ATMOSPHERIC PRESSURE.

The mean pressure for 1895 is shown numerically in Tables I and II. The data there given refer to the mercurial barometer corrected for instrumental temperature and error but not reduced to standard gravity, and, therefore, in accordance with the strict usage of physicists should be called "mercurial barometric means;" the readings by aneroid barometers would differ therefrom by amounts depending upon the local variations of gravity at different latitudes and altitudes. In accordance with the decision of the International Meteorological Congress the term atmospheric pressure should be used only in connection with true pressure or absolute measurements of pressure, that is to say, measurements that are strictly comparable among themselves and are not distorted by any variations of temperature or gravity. The corrections to barometric readings for the effects of temperature, instrumental error, and local gravity should all be applied at the same time in order to obtain the true local pressure instead of the apparent pressure as indicated by the crude readings of mercurials and aneroids. The gravity correction is a constant for each station, its value is so large as to be appreciable in studies based on the daily maps, and is still more important in studies based on the maps of monthly and annual means. The reduction of local pressure to sea-level pressure is a separate step, the method proper for this reduction varies in different countries and under different circumstances, but there is no essential difference of opinion as to the corrections for instrumental temperature and local gravity. The method of reduction to sea level and the omission of the correction for gravity as explained by Professor Hazen in the MONTHLY WEATHER REVIEW for 1894, Vol. XXII, p. 538, have continued in use in the Weather Bureau during 1895, and the figures given in Tables I and II, as also those in Chart I accord therewith.

In order to present the distribution of the true atmospheric pressure as reduced to sea level by the tables and methods of the International Meteorological Congress, the Editor has requested Mr. Park Morrill to prepare Chart IV. The data used by him, namely, the latitude, temperature, dew-point and local pressure corrected for gravity and the methods adopted are given in full in the special contribution by him to this annual summary. The simplified methods of reduction to sea level that it is convenient to adopt in daily telegraphic work are not necessarily those that should be adopted in studying monthly and annual means, therefore the data given in Mr. Morrill's table (A) and in Chart IV of sea level pressures is especially commended to the student.

As the general motions of the lower atmosphere depend intimately upon those of that portion of the air that is within 20,000 feet of sea level the Editor has requested Mr. Morrill to prepare from the same data and by the same methods a system of isobars showing pressures and temperatures at an elevation of 10,000 feet. The resulting isotherms are found by diminishing those of Chart IV by exactly 20° F., but the high level isobars are drawn on Chart V and differ entirely from those for sea level.

These charts cover the stations of the United States and Canada. The Editor has been able to add data for only a few Mexican stations, and forbears from extending the isotherms and isobars over Mexico, but hopes to cover this region more fully at a future time.

The data on Chart I show that the reduced barometric means, not corrected for gravity, were highest in the east Gulf and South Atlantic States, and lowest in Arizona. They were also quite low in Alberta, Assiniboia, and Manitoba, and eastward to Newfoundland. The data on Chart IV show that the mean annual atmospheric pressure was also lowest and highest in these same regions, respectively, but the gradients and many other details differ appreciably from those of Chart I.

The data on Chart V show that the high-level gradients are steeper, and that therefore the currents of air must be swifter, than at sea level, and even if there be a considerable systematic alteration in the adopted temperatures of the columns of air between the upper and lower levels, yet no reasonable hypothesis will alter this conclusion. Consequently the air that descends from above to the earth's surface must have a decided influence upon our winds, as it is known to have upon our weather. It is quite as proper to compare the resultant surface winds on Chart I with these high level isobars of Chart V, as it is to compare the cloud movements with the latter. In the day time the winds at the

surface of the earth generally consist of a rapid alternation of descending currents moving under the influence of upper isobars and ascending currents moving under the influence of sea-level isobars. At night time this vertical interchange is less important, and may even cease altogether. The result is a diurnal and reciprocal periodicity in the strength of the sea-level wind and of the currents at the lower cloud level, the latter being stronger in proportion as the former is weaker, as has been explained by Espy and Koeppen. There must also be a diurnal periodicity in the relation of the upper and lower isobars to the direction of the upper and lower currents, respectively. The currents at the level of cumulus clouds should be inclined to the upper isobars at a greater angle at the time of most active vertical interchange, say 2 p. m., and at a less angle at the time of minimum sea-level temperatures, say 6 a. m., but the Editor is not aware that observations are at hand to test the truth of this deduction.

MOVEMENTS OF CENTERS OF HIGH AND LOW BAROMETER DURING 1895.

The location of an area of high or low pressure is, to a limited extent, affected by the method adopted in the reduction of the barometer to sea level. The following summary, therefore, holds good, especially in connection with the method adopted by the Weather Bureau for the past few years. The average daily and hourly movements of the centers of the areas are given by paths and by days in the individual tables of the successive MONTHLY WEATHER REVIEW, and the monthly sums are collected together in the following table for the purpose of taking the annual means by paths and by days.

Movements of areas of high and low barometer for 1895.

Month.	High areas.				Low areas.			
	By paths.		By days.		By paths.		By days.	
	No.	Movement.	No.	Movement.	No.	Movement.	No.	Movement.
		Miles.		*Miles.*		*Miles.*		*Miles.*
January	11	10,400	28.5	25,000	15	10,326	46.0	29,400
February	12	7,341	37.0	21,050	17	10,457	43.5	26,400
March	11	7,041	41.5	24,150	18	12,756	46.5	32,300
April	10	5,314	65.0	33,390	14	8,971	66.5	40,500
May	6	3,142	19.0	10,200	8	4,185	29.5	15,450
June	4	2,393	24.5	14,558	4	1,932	17.5	7,890
July	11	5,168	38.0	16,670	11	5,711	42.5	21,880
August	14	6,323	42.0	20,480	17	9,077	62.0	28,920
September	9	4,683	43.0	21,530	9	5,276	36.0	20,920
October	11	6,765	46.0	29,510	15	9,364	50.5	30,850
November	4	2,037	37.5	18,950	10	8,199	21.5	17,470
December	3	1,457	12.0	5,915	14	10,525	46.5	32,980
Sums	106	62,073	434.0	241,393	152	96,709	509.5	304,800
Mean daily velocity	585		556		636		598	
Mean hourly velocity	24.4		23.2		26.5		24.9	

TEMPERATURE.

The mean annual temperature is shown by the isotherms on Chart I. These temperatures relate to the surface of the ground. The individual figures are given in Table I of data for Weather Bureau stations. The lowest annual averages within the United States were: St. Vincent, 35.3; Moorhead, 38.5; Sault Ste. Marie, 38.6; Williston, 38.9; Duluth, 39.1; Havre and Bismarck, 39.8. The highest averages were: Key West, 75.9; Jupiter, 72.8; Yuma, 72.4; Tampa, 70.9.

The mean annual temperature was above the normal in New England and in the Missouri Valley, elsewhere it was below the normal; the regions of large deficits were the east and west Gulf States.

The maximum temperatures are shown both by the upper figures and full lines on Chart II; the minimum temperatures of the year are shown by the lower figures and the dotted lines on the same chart. The absolute range of temperature during the year is easily obtained by comparing the full and dotted lines on this chart. In general, maximum temperatures exceeding 100°, occurred as follows: 102, Columbia, S. C., Omaha, and Independence; 103, San Antonio, Tex., Sioux City, and Huron; 104, Walla Walla; 106, Pierre; 108, Red Bluff; 110, Fresno; the absolute maximum for the whole country was 114 at Yuma.

Minimum temperatures of 35° or less occurred at Bismarck, —39; Williston, —40; St. Vincent, —41; the absolute minimum for the whole country was —41° at St. Vincent.

The region of large annual ranges of temperature were: Upper Lake, Upper Mississippi and Missouri Valleys, the Dakotas, northern and middle Slopes.

The small annual ranges were: Key West, 42; Point Reys Light, 49.

The accumulated departures of average monthly temperatures are given in Table III, and show that there was a steady increasing deficit throughout the year over the lower Lakes, Atlantic and Gulf States, as also over the northern, middle, and southern Rocky Mountain Slopes, and the northern, middle and southern Pacific Slopes. A diminishing deficit amounting to an excess in some places prevailed in the upper Lake Region, North Dakota, the Mississippi and Missouri Valleys.

PRECIPITATION.

The total annual fall of rain and melted snow for 1895 is shown on Chart III. The greatest precipitation was Tatoosh Island, 92.95; East Clallam, 90.35; Jupiter, 70.47; Astoria, 70.75; the least was 1.33 at Yuma, 4.17 at Independence, and 6.84 at Winnemucca.

An annual rainfall above 60 inches occurred at Hatteras, Jupiter, East Clallum, Fort Canby, Pysht, Tatoosh Island, and Astoria.

An annual rainfall of less than 20 inches prevailed in North Dakota, the northern part of the Missouri Valley, and generally over the northern and middle Slope, the Southern, middle, and northern Plateau, and the south Pacific Coast regions.

The accumulated departures of total monthly precipitation from the normal values are shown in Table IV, from which it appears that a steadily increasing deffcit has prevailed in all regions except Florida, the southern Slope, and southern Plateau. The larger accumulated deficits were: Ohio Valley and Tennessee, 11.00; middle Atlantic, 9.10; upper Mississippi, 7.80; east Gulf, 8.60.

WIND.

The prevailing direction of the wind, namely, that which occurred most frequently at the two hours of regular observations for telegraphic report, 8 a. m. and 8 p. m., eastern time, is given in Table I. The annual resultant wind deduced from these same observations without taking account of the force of the wind (which is equivalent to attributing a uniform force to all winds) is given in table V. These resultants are also presented graphically on Chart I in connection with the barometric means. They should also be compared with the pressures on Charts IV and V to which they are intimately related.

Owing to the great labor of computation the resultant winds, as deduced from hourly readings of the self-registering anemometers, have not been computed during the year 1895, but the relation between the resultants from two observations per day and those from twenty-four hourly observations can be estimated by a comparison between Tables V and VI, pp. 544 and 545 of the Summary for 1894.

MOISTURE.

The mean temperature of the dew-point and the mean relative humidity are given in Table I.

For the sake of certain studies in hygiene the mean temperature of the wet-bulb thermometer has been given each month. The thermometer from which this temperature is read is whirled at the rate of about 10 feet per second within the light wooden shelter that protects from direct radiation. The average wet bulb for the year can be easily inferred from the mean temperature and dew-point of Table I as the wet-bulb reading is approximately midway between these two.

The total quantity of moisture in the air for the current year can be found by the table given on pages 539–540 of the Annual Summary for 1894, and does not differ to any important extent from the figures there given for that year.

FREQUENCY OF THUNDERSTORMS.

The successive MONTHLY WEATHER REVIEWS have given for each day and each State the number of thunderstorms reported by both regular and voluntary observers. Tables VI and VII give a summary of these monthly tables. In order to ascertain the relative frequency of thunderstorms, as explained in the Summary for 1884, it is proper to divide the number of storms reported by the number of stations in order to deduce the average number per station. The results of this division are given in the eighth column of the following table, which shows that the greatest frequencies per station per year are: Florida, 36.5; Louisiana, 20.7; Minnesota, 18.1; Missouri, 17.4. The smallest frequencies are: Oregon, 2.5; Washington, 2.2. The product of the observed number of thunderstorms by the reduction factors given in column five of the following table would give the approximate total number of thunderstorms for the respective States, which total number, of course, depends largely on the area of the State, and is omitted from this table, as it has no meteorological significance as compared with the frequency per station.

FREQUENCY OF AURORAS.

Tables VIII and IX give a summary of the detailed tables of auroral frequency in the respective MONTHLY WEATHER REVIEWS. In the absence of more precise knowledge, it is assumed that the number of observers reporting all auroras is the same as those reporting all thunderstorms; the total number of either class of observers is decidedly less than the total number of those who report rainfall and temperature. The total number of auroras reported divided by the number of observing stations for any State gives the relative frequency per station, and this number relates to a physical phenomenon and is comparable with similar ratios for other parts of the world, provided the aurora is so low as not to be obscured by a cloudy sky. On the other hand, if the auroral light emanate from a region far above the cloud, then a further correction for cloudiness is needed, but this has not been applied in the present case, as the Editor believes that we have no certain proof as to the extreme altitude of the auroras, and that, on the other hand, there are many reasons to believe that it emanates from the cloud region itself and stands in intimate connection with the condensation of moisture by passing through a critical condition of molecular instability that apparently attends the formation of rain and snow.

Frequency of thunderstorms and auroras during 1895.

State.	Areas in units of 10,000 sq. miles.	Number of stations. Needed.	Number of stations. Reporting.	Reduction factor.	Total for 1895. Thunderstorms.	Total for 1895. Auroras.	Frequency per station. Thunderstorms.	Frequency per station. Auroras.
Alabama	5.1	128	45	2.8	382	0	8.5	0.00
Arizona	11.4	385	30	12.8	190	0	6.3	0.00
Arkansas	5.2	130	40	3.2	393	0	9.8	0.00
California	15.8	395	115	3.4	157	3	1.4	0.03
Colorado	10.4	260	75	3.4	765	37	10.2	0.49
Connecticut	0.5	12	20	0.6	286	29	14.3	1.45
Delaware	0.2	5	6	0.8	85	26	14.2	4.36
District of Columbia	0.01	0.2	2	0.5	32	0	16.0	0.00
Florida	5.9	148	30	4.9	1,094	0	36.5	0.00
Georgia	5.8	145	45	3.2	371	0	8.2	0.00
Idaho	8.6	215	26	8.3	168	37	6.5	1.42
Illinois	5.5	138	75	1.8	955	90	12.7	1.20
Indiana	3.4	85	35	2.4	339	20	9.7	0.57
Indian Territory	6.9	172	5	34.4	42	0	8.4	0.00
Iowa	5.5	138	80	1.7	861	128	1.8	1.60
Kansas	8.1	202	65	3.1	519	32	8.0	0.49
Kentucky	3.8	95	35	2.7	212	4	6.1	0.11
Louisiana	4.1	102	45	2.3	933	0	20.7	0.00
Maine	3.5	88	15	5.9	134	111	8.8	7.40
Maryland	1.1	28	30	0.9	434	18	14.4	0.60
Massachusetts	0.8	20	65	0.3	640	127	9.7	1.95
Michigan	5.6	140	60	2.3	405	106	6.8	1.77
Minnesota	8.4	210	60	3.5	1,086	372	18.1	6.20
Mississippi	4.7	118	40	3.0	578	0	14.4	0.00
Missouri	6.5	162	80	2.0	1,391	17	17.4	0.21
Montana	14.4	360	25	1.4	132	111	5.3	4.44
Nebraska	7.6	190	80	2.4	557	79	7.0	0.99
Nevada	11.2	280	35	8.0	188	24	5.4	0.69
New Hampshire	0.9	22	20	1.1	174	137	8.7	6.85
New Jersey	0.8	20	45	0.4	595	46	13.2	1.02
New Mexico	12.1	302	25	12.1	148	0	5.9	0.00
New York	4.7	118	60	2.0	564	129	9.4	2.10
North Carolina	5.1	128	50	2.6	715	3	14.3	0.06
North Dakota	7.5	185	30	6.2	138	288	9.6	9.60
Ohio	4.0	100	125	0.8	1,360	126	10.9	1.01
Oklahoma	.....	.....	15	.....	106	0	7.1	0.00
Oregon	9.5	238	45	5.3	111	2	2.5	0.04
Pennsylvania	4.6	115	70	1.6	752	27	10.7	0.39
Rhode Island	0.1	2	6	0.3	64	11	10.7	1.43
South Carolina	3.4	85	35	2.4	588	1	16.8	0.03
South Dakota	7.6	190	40	4.8	289	99	7.2	2.48
Tennessee	4.6	115	35	3.3	593	1	16.9	0.03
Texas	27.4	686	75	9.1	604	0	8.1	0.00
Utah	8.4	210	25	8.4	148	0	5.9	0.00
Vermont	1.0	25	12	2.1	151	60	12.6	5.00
Virginia	6.1	152	35	4.3	292	5	8.3	0.14
Washington	7.0	175	45	3.9	97	55	2.2	1.22
West Virginia	2.3	58	30	1.9	270	1	9.0	0.03
Wisconsin	5.3	132	55	2.2	720	277	5.0	5.04
Wyoming	9.8	245	10	24.5	34	8	3.4	0.80

THE ANNUAL SNOWFALL.

By the EDITOR.

The successive MONTHLY WEATHER REVIEWS give tables and charts showing the total snowfall during the month; the annual summaries may be made by presenting these monthly sums, either by calendar years, or by totals for the respective winters. Each method has its advantage in connection with some special study, but, both from an agricultural point of view and from the point of view of the geologist who is studying the phenomena of the Glacial epochs and that of the student of river flow, it is especially desirable to study the snowfall of the entire winter as a whole, avoiding the break at the 1st of January that is introduced by the tabulation according to calendar years. The Editor has therefore prepared from data furnished by Mr. A. J. Henry for the United States, and by Prof. R. F. Stupart for the Dominion of Canada the accompanying tables, X and XI, respectively. These tables show the total snowfall received during the twelve months beginning July 1 and ending June 30 of the following calendar year. The tables begin with the year 1884, when the observers of the United States were generally requested to measure and record snowfall in a uniform manner, but many individual records could be compiled for earlier years. It may be possible, by charting the individual snowfalls, to insert approximate interpolated values for occasional missing years, and thus obtain a set of normals that shall be uniformly intercomparable, but this desirable step is deferred until the end of the lustrum 1896–1900, as adopted by the International Meteorological Congress.

The depth of snowfall is given as measured in inches when

freshly fallen, and before it has to any great extent become packed either by its own weight, or by the wind, or by melting and re-gelation. Under these circumstances, it is not very erroneous to assume that 10 inches of snow would reduce by melting to 1 inch of water. The ratio 10 is known to be occasionally too small; instances of very light snow have occurred where the ratio is as large as 20, whereas in very wet snow ratios of 8, 7, and even 4 have been known; but 10 is considered as a very fair average for the United States and Canada. If, therefore, the depths as given in Tables X and XI be divided by 10 we obtain the equivalent water, and if this be divided by the total precipitation for the year we obtain the snowfall expressed as a percentage of the total snow and rain. A comparison of the total accumulated snowfall with the actual depth of snow lying on the ground, as published either in the MONTHLY WEATHER REVIEW or in the weekly chart of Depth of Snow on the Ground, published by the Weather Bureau, must impress one with the conviction that the accumulation of snow on the ground during the winter is prevented, not by rainfall, nor yet by its melting and penetration into the soil, but, especially and almost entirely, by the evaporation produced by the strong dry winds in the presence of sunshine. The accumulation of snow that in recent geologic times formed a general glaciation over the Lake Region, St. Lawrence Valley, and the neighboring regions, may have been due to the preservation of the snow by cloudy, foggy weather and moist winds, rather than to any excessive snowfall, and such a change in the climate and winds would be produced if the Rocky Mountain Plateau were submerged and the interior plains of the United States and Canada were covered by a shallow sea.

The enormous snowfalls recorded at high stations, such as Pikes Peak, show the influence of elevation above the surrounding country. The contrast of snowfall at Denver and Pikes Peak is like that between Mount Washington and its surrounding low land stations. In these and similar cases there is a tendency to snowfall with every passing cloud; in fact, the cloud that envelopes the summit is generally a local one, due to the upward deflection of winds striking the mountain side. It is safe to say that a broad plateau at the level of Pikes Peak would not show any snowfall such as recorded at that station, except, perhaps, at its immediate windward edge. The accumulation of hoar frost or frostwork on mountain summits is not to be confounded with the actual snowfall, no more than the cloud particles caught in the rain-gauge should be confounded with rainfall. Both the frostwork and the catch of fog in the gauge are like the drip from the trees in foggy weather, to be considered as moisture forcibly extracted from the air by contact with obstacles, and not as rain or snow naturally precipitated by force of gravity. Still, in the growth of a glacier and in the irrigation of dry soil, such formations of frostwork and drip have an appreciable importance.

From an agricultural point of view the quantity of snowfall has a twofold importance. A small fraction is melted by virtue of the warmth of the soil and percolates through it, but the principal work of the snow covering is to retain in the soil what little moisture may be there and to keep the surface at a uniform temperature near the freezing point, while the upper surface of the snow experiences the evaporation by day and the low temperature at night that would otherwise occur at the bare surface of the ground.

From a meteorological point of view the covering of the land by the snow has an important bearing on the temperature and moisture of the air and resulting winds. The air in contact with a widespread covering of snow is cooled down to especially low temperatures during the nighttime and the winter season by radiation that is uncompensated by heat from other sources; whereas during the daytime the solar radiation is largely consumed in melting a small thickness of snow; so that both during the day and the night the air over a field of snow is colder than over the bare ground.

REDUCTION OF BAROMETRIC PRESSURE TO SEA LEVEL.

By PARK MORRILL, Forecast Official. (Dated May 5, 1896.)

Under instructions of the Chief of the Weather Bureau, a special board has had under consideration, during the past year, the question of adopting some satisfactory plan of reduction to sea level. It is agreed that the formula of reduction to be used should be that of the International Meteorological Committee. This formula in English measures is—

$$\log \frac{P_0}{P} = \frac{H\left(1-0.378\frac{E}{B}\right)}{60368.6\,[1.00157-0.002039\ (t-32)]} \times$$

$$\times \frac{1}{(1-0.00259\cos.2l)\left(1-\frac{H}{20902950}\right)}$$

Wherein, H=altitude, in feet, of the point of observation.
P=pressure, in inches, at altitude H.
P_0=pressure, in inches, reduced to sea level.
t=mean temperature, in Fahrenheit degrees, of air column.
E=mean vapor pressure, in inches, of air column.
B=mean pressure, in inches, of air column.
l=latitude of point of observation.

In case of observations made in free air above a sea level plane, this formula defines the relations which must exist between the pressures at the point of observation and at sea level vertically below, provided there be no vertical acceleration within the air column and that the effects of viscosity and friction be neglected. That these effects are small has been shown by Professor Ferrel, and we are forced to disregard them because of our observational limitations.

When, however, we seek to apply the sea-level reduction to observations of pressure made at the earth's surface, in which case we have no air column below us, the problem becomes a purely hypothetical one, and the reduction is resorted to only for its assistance in the study of horizontal gradients of pressure. In such use of the above formula we are at once confronted with the question; What temperature and vapor pressure are to be assigned to the imaginary air column? Owing to the small effect of the latter of these factors, no serious error will result from using in the reduction some function of the vapor pressure at the point of observation. The difficulty lies in assigning a proper reduction temperature; this gives no trouble for observations at altitudes below 1,000 feet, as any reasonable modification of the observed temperature will produce inconsiderable change in the reduced pressure for elevations of this magnitude.

The problem of real difficulty is therefore found in the determination of the proper reduction temperature in case of observations at altitudes exceeding 1,000 feet. Among the present stations of the Weather Bureau, with a single excep-

tion, this difficulty obtains only in the elevated region between the Mississippi Valley and the Pacific Coast. For several months past the writer has devoted considerable labor to a study of this problem, as presented in our elevated western stations.

The results obtained may be briefly summarized in the following theses:

1. Normal reduction temperatures may be determined from the normal observed temperature reduced to sea level by assuming a decrement of temperature with altitude, ranging from 1.5° F. per 1,000 feet in winter to 2.5° in summer, and being 2° per 1,000 feet for the average of the whole year.

2. Observed temperatures may be reduced to sea-level temperatures (whereby is meant such temperatures as would exist if the present terrestrial surface were replaced by a sea-level plain, *while the general features of the atmospheric circulation remained unchanged*) by applying to them increments for altitude of the magnitude noted above and further modifying them by *local corrections* determined as follows. The normal temperatures increased proportionately to the various altitudes of stations are to be charted for a considerable extent of country and isotherms drawn. These, while forming a remarkably uniform system of lines as compared with those based on the original observed temperatures, are more or less wavy and irregular as a result of local peculiarities of temperature. Through these wavy lines smooth lines are drawn with a free hand and the isothermal chart thus formed is believed to closely approximate the desired chart of sea-level temperatures as above defined. Temperatures taken from the latter chart furnish the data required by the first thesis.

The propositions of the preceding paragraphs lead directly to the reduction of normal temperatures to sea level. In practice, the result is a set of corrections to be applied to the observed temperatures in order to form proper temperatures for use in reductions of pressure. These corrections depend mainly on the elevation of the station, but also on local temperature anomalies, such as the winter fœhn at the eastern base of the Rocky Mountains. The "reduction temperature" thus obtained depends *entirely on a discussion of temperature data*, and hence does not beg the question as to what the reduced barometric pressure should be.

The "reduction temperature corrections," established as above, are strictly applicable to normal temperatures. For the reduction of an individual observation of pressure, made under abnormal conditions, a further modification of temperature may, at least theoretically, be necessary. In the reduction of annual means, however, the abnormality will be so slight that those normal corrections may be used without modification, and this has been done in computing the sea-level temperatures and pressures of the accompanying table (A) for 1895 for elevations of 1,000 feet or more. At lower stations (except a few on the Pacific Coast, where the local correction is considerable) the sea-level temperature is formed from that observed simply by adding the proper increment for altitude, as the local correction would make no appreciable change in the reduced pressure.

The formula of barometric reduction to sea level as above given is rigidly that of the International Meteorological Committee. All necessary data are given in detail in the following table (A). The resultant isothermal and isobaric lines are shown on Chart IV. There are also included in the table and chart data from a number of Canadian stations, from which observations are received by the courtesy of the Canadian Meteorological Office. The reduction of these has been made by the same method, normal data from these stations having been included in my previous investigation. Data for Mexican stations has been taken from recent publications of a few observatories in that country.

(A.)—*Table of data for* 1895.

Station.	Elevation.	Latitude.	Mean observed pressure.*	Mean observed temperature.	Mean dew-point.	Mean reduction temperature.	Mean pressure reduced to sea level.*	Mean temperature reduced to sea level.
New England.	*Feet.*	° ′	*Inches.*	°F.	°F.	°F.	*Inches.*	°F.
Eastport, Me	76	44 54	29.89	42.5	34	42.6	29.97	42.7
Portland, Me	103	43 39	29.87	45.2	38	45.3	29.98	45.4
Northfield, Vt	872	44 10	29.07	41.6	33	42.5	30.03	43.4
Boston, Mass	125	42 21	29.88	49.8	39	49.9	30.02	50.0
Nantucket, Mass	14	41 17	30.01	49.1	43	49.1	30.03	49.1
Block Island, R. I	27	41 10	30.00	48.7	43	48.7	30.03	48.7
New Haven, Conn	107	41 18	29.91	49.3	40	49.4	30.03	49.5
Middle Atlantic States.								
Albany, N. Y	85	42 39	29.94	48.5	40	48.6	30.04	48.7
New York, N. Y	314	40 43	29.71	51.4	42	51.7	30.05	52.0
Harrisburg, Pa	377	40 16	29.65	51.2	42	51.6	30.06	52.0
Philadelphia, Pa	117	39 57	29.93	53.6	42	53.7	30.05	53.8
Baltimore, Md	148	39 18	29.90	54.2	42	54.3	30.06	54.4
Washington, D. C	112	38 54	29.94	54.2	43	54.3	30.07	54.4
Lynchburg, Va	685	37 25	29.33	56.1	44	56.8	30.06	57.5
Norfolk, Va	57	36 51	29.99	58.8	49	58.9	30.05	59.0
South Atlantic States.								
Charlotte, N. C	773	35 13	29.23	58.6	46	59.4	30.06	60.2
Hatteras, N. C	11	35 15	30.04	60.8	55	60.8	30.06	60.8
Kittyhawk, N. C	9	36 00	30.02	58.8	52	58.8	30.03	58.8
Raleigh, N. C	388	35 45	29.66	58.4	47	58.8	30.07	59.2
Wilmington, N. C	78	34 14	29.98	61.9	53	62.0	30.07	62.1
Charleston, S. C	52	32 47	30.04	64.7	55	64.8	30.09	64.9
Augusta, Ga	180	33 28	29.87	62.5	50	62.7	30.06	62.9
Savannah, Ga	98	32 05	29.97	65.4	55	65.5	30.07	65.6
Jacksonville, Fla	43	30 20	30.01	68.0	58	68.0	30.06	68.0
Florida Peninsula.								
Jupiter Fla	28	26 57	30.00	72.8	65	72.8	30.03	72.8
Key West, Fla	22	24 34	30.01	75.9	67	75.9	30.03	75.9
Tampa, Fla	36	27 57	30.02	70.9	62	70.9	30.05	70.9
Eastern Gulf States.								
Atlanta, Ga	1,131	33 45	28.88	59.7	49	60.8	30.07	61.9
Pensacola, Fla	56	30 25	29.99	66.0	57	66.1	30.05	66.2
Mobile, Ala	57	30 41	30.00	65.3	57	65.4	30.06	65.5
Montgomery, Ala	221	32 23	29.83	64.0	52	64.2	30.06	64.4
Meridian, Miss	358	32 21	29.67	62.3	53	62.7	30.05	63.1
Vicksburg, Miss	254	32 22	29.77	64.1	53	64.4	30.04	64.7
New Orleans, La	54	29 58	29.99	67.5	57	67.6	30.05	67.7
Western Gulf States.								
Shreveport, La	249	32 30	29.77	63.8	53	64.0	30.03	64.2
Fort Smith, Ark	481	35 22	29.52	58.5	49	59.0	30.04	59.5
Little Rock, Ark	302	34 45	29.72	60.3	49	60.6	30.04	60.9
Corpus Christi, Tex	20	27 49	29.99	68.8	63	68.8	30.01	68.8
Galveston, Tex	42	29 18	30.00	67.6	60	67.6	30.04	67.6
Palestine, Tex	510	31 45	29.50	64.3	53	64.8	30.03	65.3
San Antonio, Tex	704	29 17	29.28	68.0	52	68.7	30.02	69.4
Ohio Valley and Tennessee.								
Chattanooga, Tenn	762	35 04	29.27	58.6	47	59.4	30.08	60.2
Knoxville, Tenn	980	35 56	29.04	57.9	46	58.0	30.08	59.0
Memphis, Tenn	399	35 09	29.63	60.6	48	61.0	30.06	61.4
Nashville, Tenn	545	36 10	29.48	57.8	46	58.3	30.06	58.8
Lexington, Ky	989	38 02	28.99	53.7	41	54.7	30.05	55.7
Louisville, Ky	525	38 15	29.48	55.5	42	56.0	30.05	56.5
Indianapolis, Ind	706	39 46	29.22	52.1	40	52.9	30.05	53.7
Cincinnati, Ohio	628	39 06	29.38	53.6	40	54.2	30.06	54.8
Columbus, Ohio	824	39 58	29.18	57.6	39	52.4	30.06	53.2
Pittsburg, Pa	842	40 32	29.15	52.3	42	53.1	30.05	53.9
Parkersburg, W. Va	638	39 16	29.38	53.1	43	53.7	30.07	54.3
Lower Lake Region.								
Buffalo, N. Y	690	42 53	29.27	46.4	37	47.1	30.03	47.8
Oswego, N. Y	335	43 29	29.64	45.4	37	45.7	30.01	46.0
Rochester, N. Y	523	43 08	29.45	47.4	37	47.9	30.03	48.4
Erie, Pa	714	42 07	29.26	47.4	38	48.1	30.04	48.8
Cleveland, Ohio	740	41 30	29.23	48.3	39	49.0	30.04	49.7
Sandusky, Ohio	629	41 25	29.35	49.0	38	49.6	30.03	50.2
Toledo, Ohio	674	41 40	29.31	48.2	38	48.9	30.04	49.6
Detroit, Mich	724	42 20	29.24	47.2	36	47.9	30.03	48.6
Upper Lake Region.								
Alpena, Mich	609	45 05	29.32	41.6	34	42.2	29.99	42.8
Grand Haven, Mich	628	43 05	29.31	45.7	37	46.3	30.00	46.9
Marquette, Mich	734	46 34	29.17	40.6	32	41.3	29.98	42.0
Port Huron, Mich	639	43 00	29.33	45.1	36	45.7	30.03	46.3
Sault Ste. Marie, Mich	642	46 28	29.27	38.6	32	39.2	29.98	39.8
Chicago, Ill	824	41 52	29.13	47.1	36	47.9	30.03	48.7
Milwaukee, Wis	673	43 02	29.28	45.1	35	45.8	30.02	46.5
Green Bay, Wis	617	44 31	29.34	43.8	33	44.4	30.02	45.0
Duluth, Minn	702	46 48	29.20	39.1	31	39.8	29.98	40.5
North Dakota.								
Moorhead, Minn	935	46 52	28.95	38.5	29	39.4	29.99	40.3
St. Vincent, Minn	794	48 56	29.11	35.3	28	36.1	29.99	36.9
Bismarck, N. Dak	1,674	46 47	28.20	39.8	26	41.2	30.02	42.9
Williston, N. Dak	1,875	48 09	27.96	38.9	24	39.9	30.00	41.8
Upper Mississippi Valley								
St. Paul, Minn	850	44 58	29.09	43.6	32	44.4	30.02	45.3
La Crosse, Wis	730	43 49	29.24	45.7	35	46.4	30.02	47.1
Davenport, Iowa	613	41 30	29.35	48.7	36	49.3	30.02	49.9
Des Moines, Iowa	869	41 35	29.10	49.0	36	49.9	30.04	50.8
Keokuk, Iowa	613	40 22	29.37	50.7	38	51.3	30.03	51.9
Cairo, Ill	359	37 00	29.65	56.7	46	57.1	30.04	57.5
Springfield, Ill	644	39 48	29.34	51.3	39	51.9	30.04	52.5
Hannibal, Mo	534	39 41	29.46	51.4	40	51.9	30.03	52.4
St. Louis, Mo	571	38 38	29.45	55.1	43	55.7	30.07	56.3
Missouri Valley.								
Kansas City, Mo	963	39 05	29.02	53.2	42	54.2	30.03	55.2
Springfield, Mo	1,324	37 12	28.63	53.6	43	54.9	30.03	56.2
Omaha, Nebr	1,108	41 16	28.83	50.6	36	51.7	30.02	52.8
Sioux City, Iowa	1,165	42 29	28.75	47.8	34	48.8	30.01	50.0
Pierre, S. Dak	1,470	44 24	28.42	46.5	32	46.6	30.00	48.1
Huron, S. Dak	1,310	44 21	28.58	43.8	30	46.4	30.00	47.7

(A.)—*Table of data for* 1895—Continued.

Station.	Elevation.	Latitude.	Mean observed pressure.*	Mean observed temperature.	Mean dew-point.	Mean reduction temperature.	Mean pressure reduced to sea level.*	Mean temperature reduced to sea level.
Northern Slope.	*Feet.*	° ′	*Inches.*	°F.	°F.	°F.	*Inches.*	°F.
Havre, Mont	2,477	48 34	27.34	39.8	25	41.7	29.98	44.2
Miles City, Mont	2,374	46 25	27.46	43.0	30	44.9	29.98	47.3
Helena, Mont	4,110	46 34	25.84	42.8	25	46.8	30.07	50.9
Rapid City, S. Dak	3,290	44 04	26.58	45.3	28	46.3	29.98	49.6
Cheyenne, Wyo	6,098	41 08	23.98	43.7	26	49.0	30.00	55.1
Lander, Wyo	5,377	42 50	24.62	41.0	22	46.0	30.03	51.4
North Platte, Nebr	2,826	41 08	27.06	48.1	34	50.8	30.01	53.6
Middle Slope.								
Denver, Colo	5,290	39 45	24.71	48.8	26	52.0	29.97	57.3
Pueblo, Colo	4,713	38 18	25.25	49.8	25	53.1	29.98	57.8
Concordia, Kans	1,396	39 35	25.52	53.3	37	55.2	30.00	56.6
Dodge City, Kans	2,504	37 45	27.38	53.1	36	55.9	29.97	58.4
Wichita, Kans	1,351	37 41	28.57	55.5	43	57.2	29.99	58.6
Oklahoma, Okla	1,299	35 26	28.72	57.9	46	58.8	30.03	60.0
Southern Slope.								
Abilene, Tex	1,749	32 23	28.21	61.4	45	62.2	30.02	63.9
Amarillo, Tex	3,691	35 13	26.24	53.4	35	56.8	29.99	60.5
Southern Plateau.								
El Paso, Tex	3,767	31 47	26.16	62.2	31	64.4	29.93	68.2
Santa Fe, N. Mex	6,998	35 41	23.26	47.3	22	54.6	29.97	61.6
Yuma, Ariz	139	32 45	29.72	72.4	42	72.5	29.87	72.6
Independence, Cal	3,884	36 48	26.00	58.0	23	58.8	29.90	62.7
Middle Plateau.								
Carson City, Nev	4,720†	39 08	25.29	48.3	24	53.0	30.03	57.7
Winnemucca, Nev	4,340	40 58	25.06	47.1	19	54.0	30.05	58.3
Salt Lake City, Utah	4,344	40 46	25.65	50.2	31	54.2	30.03	58.5
Northern Plateau.								
Baker City, Oreg	3,470	44 50	26.46	45.2	29	51.8	30.04	55.3
Idaho Falls, Idaho	4,742	43 29	25.25	41.7	26	46.2	30.08	50.9
Spokane, Wash	1,980	47 40	28.00	48.0	30	49.5	30.06	51.4
Walla Walla, Wash	1,008	46 02	28.97	53.1	38	51.5	30.05	52.5
North Pacific Coast.								
Fort Canby, Wash	179	46 16	29.86	50.5	45	50.7	30.06	50.9
Port Angeles, Wash	29	48 07	30.01	47.3	41	47.0	30.04	47.3
Seattle, Wash	119	47 38	29.92	51.2	41	51.3	30.05	51.4
Tatoosh Island, Wash	86	48 23	29.95	48.4	44	48.5	30.03	48.6
Portland, Oreg	157	45 32	29.89	52.0	41	52.2	30.04	52.4
Roseburg, Oreg	523	43 13	29.46	52.3	42	52.8	30.03	53.3
Middle Pacific Coast.								
Eureka, Cal	64	40 48	30.00	50.9	46	53.1	30.07	53.2
Red Bluff, Cal	334	40 10	29.64	62.2	41	56.0	30.00	56.3
Sacramento, Cal	71	38 35	29.91	60.2	46	58.1	29.99	58.2
San Francisco, Cal	158	37 48	29.86	55.6	48	55.8	30.03	56.0
South Pacific Coast.								
Fresno, Cal	332	36 43	29.61	62.5	41	60.3	29.96	60.6
Los Angeles, Cal	330	34 03	29.61	61.7	48	61.7	29.96	62.0
San Diego, Cal	69	32 43	29.89	60.5	57	63.0	29.96	63.1
San Luis Obispo, Cal	201	35 18	29.78	58.5	45	58.7	30.00	58.9
Canadian Stations.								
St. Johns, N. F.	125	47 34	29.80	42.0	....	42.1	29.94	42.2
Sydney, C. B. I.	55	46 10	29.90	42.9	....	43.0	29.96	43.1
Halifax, N. H.	118	44 39	29.85	44.2	....	44.3	29.98	44.4
Grand Manan, N. B.	49	44 47	29.91	43.5	....	43.5	29.96	43.5
Yarmouth, N. S.	65	43 50	29.91	43.9	....	44.0	29.98	44.1
Charlottetown, P. E. I.	38	46 14	29.90	42.5	....	42.5	29.95	42.5
Chatham, N. B.	21	47 03	29.92	39.6	....	39.6	29.95	39.6
Father Point, Que	20	48 31	29.91	36.4	....	36.4	29.93	36.4
Quebec, Que	296	46 48	29.62	39.1	....	39.4	29.95	39.7
Montreal, Que	187	45 30	29.76	41.9	....	42.1	29.97	42.3
Rockliffe, Ont	472	46 12	29.43	36.8	....	37.3	29.96	37.8
Kingston, Ont	285	44 13	29.68	42.6	....	42.9	29.99	43.2
Toronto, Ont	350	43 39	29.63	43.2	....	43.6	30.01	43.9
White River, Ont	1,252	48 20	28.61	30.9	....	33.3	30.00	34.6
Port Stanley, Ont	592	42 40	29.37	43.6	....	44.2	30.02	44.8
Saugeen, Ont	656	44 30	29.28	41.7	....	42.4	30.00	43.1
Parry Sound, Ont	635	40 15	29.29	39.8	....	40.4	29.99	41.0
Port Arthur, Ont	644	48 27	29.25	34.6	....	35.2	29.97	35.8
Winnipeg, Man	760	49 53	29.13	32.7	....	33.5	29.98	34.3
Minnedosa, Man	1,690	50 10	28.10	31.8	....	34.3	29.96	36.0
Qu'Appelle, Assin	2,115	50 44	27.67	31.8	....	34.1	29.98	36.2
Medicine Hat, Assin	2,161	50 01	27.64	38.7	....	40.3	29.97	42.5
Swift Current, Assin	2,429	50 20	27.36	35.2	....	36.9	29.99	38.3
Calgary, Alberta	3,389	51 02	26.35	35.6	....	39.0	29.92	42.4
Prince Albert, Sask	1,402	53 55	28.42	30.9	....	33.2	29.97	34.6
Edmonton, Alberta	2,158	53 14	27.61	35.3	....	38.4	29.94	40.6
Battleford, Sask	1,690	52 41	28.19	32.4	....	34.2	29.97	35.8
Spences Bridge, B. C	760	50 25	29.16	48.3	....	49.1	29.99	49.9
Hamilton, Ber	151	32 23	29.93	70.3	....	70.5	30.08	70.7
Esquimalt, B. C	28	48 26	30.01	47.2	....	47.2	30.04	47.2
Mexican Stations.								
Leon	5,894	21 07	24.25	65.7	45	71.5	29.81	77.4
Oaxaca	5,164	17 04	25.01	69.4	56	74.5	29.88	79.7
Mexico	7,487	19 26	23.02	60.3	46	70.5	29.83	78.0

* Height of the barometric column of mercury at temperature of 32° F. under the standard force of gravity at sea level in latitude 45°.
† Barometric elevation, all others are by leveling operations.

PRESSURES REDUCED TO A PLANE AT AN ALTITUDE OF 10,000 FEET.

At the request of Professor Abbe, the mean annual sea-level pressures and temperatures established above have also been reduced upward to an elevation of 10,000 feet. In making this reduction, it has been assumed that there is a uniform decrement of temperature with altitude at the rate of 2° per 1,000 feet. It has been further assumed that the dew-point may be treated as a function of temperature; it has been taken as 10° less than the temperature, since this value of the depression of the dew-point is that found by Professor Marvin to be the average of our observations. With these assumptions, and using the value of gravity for a mean latitude of 40°, the pressures at 10,000 feet may be expressed as a function only of the sea-level pressure and temperature, as shown in the table (B) below. The effect of the assumption as to gravity is to increase the north and south gradient on the isobaric chart by about 0.002 inch per degree of latitude. The isobars thus obtained at 10,000 feet elevation are shown on Chart V.

Certain minor irregularities in these high-level isobars are to be attributed to the fact that at most stations of less than 1,000 feet elevation the local temperature corrections, which were not important in the sea-level reduction, were still omitted. But in passing from the sea-level values to those at an altitude of 10,000 feet, such corrections are of equal value, whatever may have been the original elevation of the station of observation.

(B).—*Table for the reduction of sea-level pressures to a plane at an altitude of* 10,000 *feet.*

(Assuming gravity as at latitude 40° and a temperature decrement of 2° F. per 1,000 feet.)

Sea-level temperature (Fahrenheit).	Sea-level pressures.						
	29.86.	29.88.	29.90.	29.92.	29.94.	29.96.	29.98.
°	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
32	20.26	20.28	20.29	20.30	20.31	20.33	20.34
36	.32	.34	.35	.37	.38	.39	.41
40	.39	.40	.42	.43	.45	.46	.47
44	.46	.47	.48	.50	.51	.53	.54
48	.52	.54	.55	.56	.58	.59	.60
52	.59	.60	.61	.63	.64	.66	.67
56	.65	.66	.68	.69	.71	.72	.73
60	.72	.73	.74	.76	.77	.78	.80
64	.78	.79	.81	.82	.83	.85	.86
68	.84	.86	.87	.88	.90	.91	.93
72	20.91	20.92	20.94	20.95	20.96	20.98	20.99

Sea-level temperature (Fahrenheit).	Sea-level pressures.					
	30.00.	30.02.	30.04.	30.06.	30.08.	30.10.
°	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
32	20.35	20.37	20.38	20.39	20.41	20.42
36	.42	.43	.45	.46	.48	.49
40	.49	.50	.51	.53	.54	.56
44	.55	.57	.58	.59	.61	.62
48	.62	.63	.65	.66	.67	.69
52	.68	.70	.71	.72	.74	.75
56	.75	.76	.78	.79	.80	.82
60	.81	.83	.84	.85	.87	.88
64	.88	.89	.90	.92	20.93	20.95
68	20.94	20.95	20.97	20.98	21.00	21.01
72	21.00	21.02	21.03	21.05	21.06	21.08

TABLE I.—*Annual meteorological summary, Weather Bureau stations*, 1895.

Districts and stations.	Pressure, in inches.†			Temperature of the air, in degrees Fahrenheit.						Humidity.		Precipitation.			Wind.			Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.
	Mean pressure, 8 a. m. and 8 p. m. ÷ 2.	Mean reduced.	Departure from normal.	Mean max. and min. ÷ 2.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.	Greatest monthly range.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Max. velocity. Miles per hour.	Max. velocity. Direction.			
New England.																					
Eastport, Me	29.89	29.98	+ .02	42.5	+ 1.1	85	49.1	−10	35.9	53	34	75	32.88	−16.37	132	93,932	s.	72	e.	58	192	115	6.2
Portland, Me	29.87	29.97	− .01	45.2	+ 0.6	93	52.9	−11	37.4	60	38	80	38.78	− 3.90	126	65,624	nw.	49	se.	104	125	136	5.8
Northfield, Vt	29.07	30.06	+ .02	41.6	+ 0.6	90	52.3	−17	30.9	74	33	74	35.20	− 3.73	129	75,078	s.	49	sw.	114	125	126	5.6
Boston, Mass	29.89	30.06	+ .03	49.8	+ 0.9	96	57.5	− 6	42.1	56	39	70	40.17	− 6.19	118	96,340	w.	50	s.	122	104	139	5.5
Nantucket, Mass	30.02	30.06	.00	49.1	+ 0.5	89	54.5	1	43.7	48	43	81	38.32	− 5.62	134	97,847	nw.	51	e.	129	101	135	5.6
Woods Hole, Mass	.....	.....	.....	48.6	− 0.9	85	53.8	− 1	43.4	45	.....	.....	37.41	− 6.69	111	127,262	s.	70	sw.	166	87	112	4.6
Vineyard Haven, Mass	.....	.....	.....	51.6	+ 0.3	91	59.0	0	44.0	51	.....	.....	43.52	+ 2.00	127	.....	sw.	.....	.....	138	76	151	.....
Block Island, R. I	30.01	30.04	+ .01	48.7	− 0.6	85	53.9	− 4	43.6	49	43	81	49.21	+ 4.26	123	130,738	sw.	68	ne.	99	179	87	5.4
Narragansett Pier, R. I	.....	.....	.....	48.5	0.0	91	56.7	− 7	40.3	57	.....	.....	46.37	− 1.13	117	.....	sw.	.....	.....	187	40	135	.....
New Haven, Conn	29.92	30.04	.00	49.3	− 0.1	96	57.3	− 7	41.2	57	40	72	35.96	−14.26	123	78,454	n.	55	s.	162	103	100	4.5
Middle Atlantic States.																					
Albany, N. Y	29.95	30.04	+ .02	48.5	+ 0.3	97	57.4	−12	39.6	62	40	76	29.80	− 8.83	129	67,839	s.	42	se.	125	117	123	5.4
New York, N. Y	29.72	30.06	+ .01	51.4	− 0.6	97	58.6	− 3	44.2	57	42	74	35.73	− 9.52	120	110,861	nw.	73	w.	135	127	103	5.1
Harrisburg, Pa	29.66	30.06	+ .01	51.2	− 0.3	97	59.4	− 4	43.0	58	42	75	26.02	−20.71	118	62,892	w.	46	nw.	151	108	106	4.8
Philadelphia, Pa	29.94	30.06	.00	53.6	− 0.3	98	61.8	− 3	45.5	56	42	69	31.01	− 9.55	110	90,913	nw.	50	sw.	139	116	110	5.1
New Brunswick, N. J	.....	.....	.....	51.5	+ 0.1	99	62.0	−10	41.0	63	.....	.....	39.94	− 4.28	114	.....	w.	.....	.....	56	199	110	.....
Baltimore, Md	29.91	30.06	− .01	54.2	− 1.1	97	62.1	1	46.2	61	42	67	40.47	− 3.87	114	67,713	n.	42	w.*	154	141	70	4.4
Washington, D. C	29.96	30.08	.00	54.2	− 0.8	98	63.2	0	45.2	67	43	71	34.25	−10.19	128	59,602	nw.	42	nw.*	169	104	92	4.3
Cape Henry, Va	.....	.....	.....	57.7	− 0.9	99	65.0	8	50.3	59	.....	.....	46.95	− 5.88	113	.....	sw.	.....	.....	108	145	112	.....
Lynchburg, Va	29.35	30.09	+ .01	56.1	− 1.2	99	66.3	− 3	45.9	70	44	70	36.16	− 7.65	121	36,784	nw.	33	nw.	142	149	74	4.6
Norfork, Va	30.01	30.07	.00	58.8	− 0.6	100	66.8	2	50.8	66	49	77	45.41	− 6.76	131	75,239	ne.	42	nw.	198	97	70	3.9
South Atlantic States.																					
Charlotte, N. C	29.26	30.08	.00	58.6	− 1.7	100	68.0	1	49.3	68	46	70	39.16	−14.94	122	58,749	sw.	48	s.	154	122	89	4.6
Hatteras, N. C	30.07	30.08	+ .01	60.8	− 0.8	91	65.8	11	55.9	47	55	82	69.28	+ 0.80	137	123,838	sw.	60	n.	121	136	108	5.2
Kittyhawk, N. C	30.04	30.05	− .01	58.8	− 1.4	94	64.7	6	52.9	58	52	80	46.38	−10.96	130	142,515	ne.	66	n.	182	80	103	4.4
Raleigh, N. C	29.68	30.10	.00	58.4	− 0.9	100	69.9	4	49.0	67	47	72	51.12	− 4.39	140	53,638	sw.	37	sw.	129	108	128	5.1
Wilmington, N. C	30.01	30.10	+ .02	61.9	− 1.5	100	70.1	10	53.8	64	53	80	46.27	−10.54	127	72,833	ne.	48	w.	177	76	112	4.4
Charleston, S. C	30.07	30.12	+ .03	64.7	− 1.6	98	71.5	12	57.8	64	55	78	55.18	− 1.80	125	70,586	sw.	36	w.*	133	159	73	4.6
Columbia, S. C	.....	.....	.....	62.1	− 1.6	102	73.0	8	51.2	67	.....	.....	53.20	+ 6.44	116	.....	ne.	.....	.....	134	125	106	.....
Augusta, Ga	29.90	30.09	+ .02	62.5	− 2.3	100	72.5	8	52.4	67	50	72	52.10	+ 3.67	120	45,822	w.	43	nw.	170	100	95	4.4
Savannah, Ga	30.00	30.11	+ .01	65.4	− 1.5	98	74.2	12	56.5	66	55	78	54.84	+ 2.75	124	68,390	s.	42	nw.	150	129	86	4.5
Jacksonville, Fla	30.05	30.10	+ .02	68.0	− 1.7	97	77.2	14	58.8	62	58	78	46.80	− 8.80	130	63,872	ne.	50	se.	132	139	94	5.1
Florida Peninsula.																					
Jupiter, Fla	30.05	30.08	.00	72.8	− 1.8	95	79.2	27	66.3	57	65	79	72.47	+15.77	156	85,137	s.	55	n.	117	168	80	5.0
Key West, Fla	30.06	30.08	+.03	75.9	− 1.6	91	80.2	49	71.6	31	67	77	29.19	−11.04	113	85,770	e.	49	n.	148	155	62	4.6
Tampa, Fla	30.06	30.10	.....	70.9	− 0.8	95	79.4	22	62.3	55	62	80	50.64	− 1.59	122	55,663	ne.	42	sw.	103	186	76	5.2
East Gulf States.																					
Atlanta, Ga	28.91	30.10	− .01	59.7	− 1.6	98	68.2	0	51.2	71	49	74	45.92	− 7.38	125	92,275	nw.	48	nw.	173	88	104	4.6
Pensacola, Fla	30.03	30.09	+ .01	66.0	− 2.0	93	73.3	11	58.7	61	57	78	55.30	− 6.63	116	80,898	sw.	49	ne.	151	112	102	4.8
Mobile, Ala	30.04	30.10	+ .02	65.3	− 2.0	96	73.4	12	57.2	61	57	81	58.41	− 4.69	130	67,508	n.	42	nw.	100	138	127	5.6
Montgomery, Ala	29.86	30.10	.00	64.0	− 1.7	97	73.7	8	54.2	65	52	73	43.45	− 9.93	127	53,860	ne.	36	nw.*	125	118	122	5.2
Meridian, Miss	29.70	30.09	− .01	62.3	− 1.4	96	72.7	6	52.0	70	53	78	50.59	− 5.34	109	47,332	ne.	36	w.	107	139	119	5.5
Vicksburg, Miss	29.80	30.07	− .02	64.1	− 1.8	97	73.2	4	55.1	70	53	72	40.09	−17.20	120	61,049	se.	46	nw.	193	93	79	4.0
New Orleans, La	30.03	30.09	+ .03	67.5	− 1.7	94	75.0	16	60.0	58	57	76	56.44	− 6.58	141	73,761	se.	40	nw.	177	119	69	4.1
West Gulf States.																					
Shreveport, La	29.80	30.07	.00	63.8	− 2.4	98	73.1	4	54.4	70	53	73	36.55	−14.87	99	61,000	se.	43	n.	127	83	155	5.6
Fort Smith, Ark	29.55	30.06	+ .02	58.5	− 2.3	97	69.2	− 7	47.8	81	49	74	49.87	+ 5.87	118	56,458	e.	42	w.*	149	77	139	5.1
Little Rock, Ark	29.75	30.07	.00	60.3	− 1.9	96	69.1	− 2	51.4	74	49	72	49.58	− 4.62	108	60,374	sw.	60	nw.	134	114	117	5.3
Corpus Christi, Tex	30.03	30.05	.00	68.8	− 1.2	93	74.5	16	63.1	59	63	83	25.72	−11.58	76	107,993	se.	47	se.	88	156	121	5.6
Galveston, Tex	30.04	30.08	+ .03	67.6	− 2.4	94	72.4	15	63.0	50	60	79	38.91	−13.28	108	98,142	se.	49	nw.*	212	78	75	3.7
Palestine, Tex	29.53	30.08	.00	64.3	− 1.3	100	74.2	− 1	54.4	77	53	75	43.72	− 3.73	96	59,121	s.	32	s.*	102	151	112	5.6
San Antonio, Tex	29.32	30.05	+ .01	68.0	− 0.6	103	78.4	11	57.6	68	52	65	26.07	− 5.81	87	69,116	se.	46	n.	92	172	101	5.5
Ohio Valley and Tennessee.																					
Chattanooga, Tenn	29.30	30.11	+ .01	58.6	− 2.0	97	68.1	− 2	49.1	75	47	72	46.36	−10.60	122	56,646	w.	60	w.	121	128	116	5.4
Knoxville, Tenn	29.06	30.11	+ .01	57.0	− 1.2	96	66.8	− 7	47.1	78	46	72	38.75	−14.40	114	41,781	sw.	42	sw.	166	84	115	4.7
Memphis, Tenn	29.66	30.09	+ .02	60.6	− 1.0	98	69.4	− 3	51.9	77	48	72	38.59	−15.52	120	70,405	nw.	54	w.	166	96	103	4.6
Nashville, Tenn	29.50	30.09	+ .03	57.8	− 1.6	96	67.3	− 6	48.4	81	46	70	42.83	− 8.11	112	57,451	nw.	48	se.	153	106	106	4.7
Lexington, Ky	29.01	30.07	+ .01	53.7	− 1.3	95	62.7	−13	44.6	81	41	66	35.32	− 8.80	124	99,384	sw.	62	s.	93	108	162	6.2
Louisville, Ky	29.50	30.07	.00	55.5	− 1.6	100	65.0	−10	45.9	80	42	66	38.86	− 8.30	126	68,324	s.	57	sw.	143	100	122	5.2
Indianapolis, Ind	29.24	30.07	+ .01	52.1	− 0.6	100	61.6	−14	42.6	82	40	68	33.54	−11.34	126	56,324	nw.	34	w.	125	124	116	5.2
Cincinnati, Ohio	29.40	30.08	+ .01	53.6	− 1.8	97	62.3	−12	45.0	79	40	64	29.33	−11.56	110	65,329	se.	48	sw.	166	103	96	4.6
Columbus, Ohio	29.19	30.08	+ .02	51.6	− 0.7	99	61.2	− 8	42.0	72	39	68	30.74	− 9.82	130	60,440	sw.	38	sw.	93	154	116	5.7
Pittsburg, Pa	29.16	30.07	+ .02	52.3	− 0.7	98	61.2	− 6	43.4	66	42	72	27.50	− 9.98	142	58,048	nw.	35	nw.	107	141	117	5.5
Parkersburg, W. Va	29.40	30.10	+ .01	53.1	− 0.8	99	63.3	− 8	42.9	74	43	72	30.37	−11.60	132	47,774	se.	41	w.	112	124	129	5.6
Lower Lake Region.																					
Buffalo, N. Y	29.28	30.03	+ .01	46.4	0.0	98	53.3	−13	39.5	58	37	71	32.02	− 6.28	138	99,002	w.	78	w.	74	161	130	6.4
Oswego, N. Y	29.64	30.01	− .01	45.4	− 1.1	90	52.3	−12	38.6	62	37	74	32.48	− 2.87	151	95,677	s.	50	w.	113	94	158	5.8
Rochester, N. Y	29.46	30.03	+ .01	47.4	+ 0.1	94	55.5	− 8	39.3	62	37	70	30.42	− 4.62	157	71,754	sw.	52	sw.	136	122	107	5.1
Erie, Pa	29.27	30.04	+ .02	47.4	− 1.5	91	54.9	− 9	39.9	60	38	73	35.55	− 7.16	138	94,574	s.	54	sw.	105	119	141	5.9
Cleveland, Ohio	29.24	30.04	+ .02	48.3	− 0.6	94	56.0	− 6	40.6	68	39	73	26.84	−10.61	136	113,129	se.	73	s.	131	102	132	5.4
Sandusky, Ohio	29.36	30.04	− .01	49.0	− 1.4	96	56.5	− 6	41.5	70	38	71	26.82	− 9.58	118	78,695	sw.	50	nw.	84	133	148	6.1
Toledo, Ohio	29.32	30.05	+ .02	48.2	− 1.4	94	56.5	− 7	39.9	69	38	73	25.31	− 6.65	118	88,768	sw.	60	sw.	135	98	132	5.3
Detroit, Mich	29.25	30.03	.00	47.2	− 1.1	96	55.3	− 8	39.2	62	36	71	25.04	− 7.91	116	94,764	sw.	76	sw.	155	97	113	4.8
Upper Lake Region.																					
Alpena, Mich	29.32	30.00	− .01	41.6	+ 0.3	95	49.4	−23	33.8	76	34	76	21.59	−14.94	136	83,589	nw.	50	nw.	103	147	115	5.6
Grand Haven, Mich	29.32	30.01	.00	45.7	− 0.6	90	53.6	− 8	37.9	58	37	75	25.62	−10.09	138	92,341	sw.	50	sw.	112	112	141	5.8
Marquette, Mich	29.17	29.98	− .02	40.6	0.0	98	48.1	−16	33.1	70	32	76	33.04	+ 0.91	197	94,623	nw.	52	se.	67	135	161	6.6
Port Huron, Mich	29.34	30.04	+ .02	45.1	0.0	95	53.5	−16	36.6	65	36	73	26.11	− 5.71	128	99,029	s.	58	sw.	137	112	116	5.0
Sault Ste. Marie, Mich	29.27	29.98	− .02	38.6	− 0.4	89	47.2	−28	30.0	74	32	81	30.55	+ 1.02	167	72,840	nw.	42	nw.	82	118	165	6.4
Chicago, Ill	29.14	30.03	.00	47.1	− 1.6	95	54.2	−15	40.0	76	36	68	32.38	− 3.63	106	151,233	ne.	64	sw.	162	130	73	4.4
Milwaukee, Wis	29.29	30.02	− .01	45.1	− 0.1	96	52.8	−17	37.4	71	35	71	24.88	− 7.75	124	92,634	w.	50	sw.	123	122	120	5.4
Green Bay, Wis	29.34	30.02	+ .02	43.8	+ 0.2	95	53.0	−24	34.7	78	33	68	21.04	−12.39	112	77,990	s.	42	n.	68	168	129	6.3
Duluth, Minn	29.20	29.98	− .02	39.1	− 0.1	89	46.5	−27	31.7	85	31	75	22.30	− 9.75	132	85,167	ne.	54	nw.	108	151	106	5.4
North Dakota.																					
Moorhead, Minn	28.95	29.99	− .03	38.5	+ 0.9	92	49.4	−34	27.6	91	29	74	17.38	− 7.05	103	95,396	n.	61	se.	124	124	117	5.2
St. Vincent, Minn	29.10	29.98	− .03	35.3	+ 1.1	90	47.1	−41	23.4	93	28	82	20.60	+ 2.40	111	79,097	n.	40	n.	130	134	101	4.9
Bismarck, N. Dak	28.20	30.02	+ .01	39.8	− 0.1	98	52.2	−39	27.3	108	26	64	16.92	− 2.04	94	86,575	nw.	52	nw.*	151	128	86	5.0
Williston, N. Dak	27.96	29.99	− .01	38.9	− 0.4	96	50.0	−40	27.9	96	24	62	17.07	+ 3.11	116	86,611	nw.	60	nw.	108	164	93	5.5
Upper Mississippi Valley.																					
Minneapolis, Minn	.....	.....	.....	44.6	+ 0.4	96	54.5	−26	34.7	79	.....	.....	21.44	− 5.77	92	88,346	nw.	.....	.....	125	127	113	.....
St. Paul, Minn	29.09	30.02	+ .01	43.6	0.0	96	53.2	−26	34.0	79	32	67	24.26	− 3.52	105	69,145	se.	55	se.	128	129	108	5.1
La Crosse, Wis	29.24	30.02	+ .01	45.7	− 0.2	97	55.6	−24	35.8	81	35	73	22.97	− 9.03	105	65,421	s.	38	w.	125	164	76	5.0
Davenport, Iowa	29.36	30.02	− .02	48.7	− 0.6	96	57.8	−20	39.6	84	36	68	27.14	− 7.64	99	83,207	sw.	60	w.	116	146	103	5.3
Des Moines, Iowa	29.11	30.05	+ .02	49.0	0.0	98	59.1	−18	38.9	85	36	66	26.80	− 8.33	106	75,190	nw.	50	sw.	138	108	119	5.0
Keokuk, Iowa	29.38	30.04	+ .01	50.7	− 1.4	96	60.1	−22	41.3	90	38	68	29.82	− 6.02	103	69,465	sw.	42	w.	172	100	93	4.2
Cairo, Ill	29.67	30.06	.00	56.7	− 1.2	95	65.1	− 9	48.3	83	46	72	33.57	−10.46	111	72,323	s.	52	sw.	112	147	106	5.4
Springfield, Ill	29.36	30.06	.00	51.3	− 1.5	95	60.6	−20	42.0	85	39	68	35.01	− 4.66	111	85,070	s.	38	w.	129	131	105	5.0

TABLE I.—*Annual meteorological summary, Weather Bureau stations,* 1895.—Continued.

Districts and stations.	Pressure, in inches.†			Temperature of the air, in degrees Fahrenheit.							Humidity.		Precipitation.			Wind.				Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.
	Mean pressure, 8 a. m. and 8 p. m.	Mean reduced.	Departure from normal.	Mean max. and min. + 2.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.	Greatest monthly range.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Max. velocity. Miles per hour.	Max. velocity. Direction.				
Up. Miss. Valley—Cont'd.																							
Hannibal, Mo	29.47	30.05	.....	51.4	.....	95	80.6	−18	42.1	83	40	71	42.13	.....	113	81,658	sw.	50	w.	158	119	88	4.7
St. Louis, Mo	29.47	30.08	+ .02	55.1	− 1.0	96	63.4	−12	46.7	82	43	68	31.20	− 7.11	110	95,650	s.	56	sw.	160	107	98	4.6
Missouri Valley.																							
Columbia, Mo	.....	.....	.....	53.5	− 1.0	98	65.3	−16	41.7	87	.....	.....	38.83	− 1.39	120	66,768	se.	41	nw.	116	105	144	5.8
Kansas City, Mo	29.04	30.07	+ .03	53.2	− 0.7	96	62.1	−12	44.4	80	42	71	41.22	+ 3.36	101	79,474	s.	40	n.*	141	126	98	4.8
Springfield, Mo	28.65	30.06	+ .01	53.6	− 2.4	92	63.3	−17	45.0	83	43	73	45.46	− 1.74	121	87,078	se.	48	sw.*	128	138	99	4.8
Topeka, Kans	.....	.....	.....	54.2	+ 1.3	99	65.0	−14	43.3	85	.....	.....	31.23	− 3.52	96	.....	s.	....	.....	154	137	74	....
Omaha, Nebr	28.84	30.05	− .01	50.6	+ 0.8	102	60.4	−30	40.8	88	36	65	21.69	−11.44	86	74,104	se.	38	n.	140	89	136	5.3
Sioux City, Iowa	28.76	30.01	− .01	47.8	− 0.7	108	58.7	−33	36.9	89	34	65	20.29	− 4.21	79	98,016	nw.	60	nw.	127	138	100	5.1
Pierre, S. Dak	28.42	30.00	− .03	46.5	+ 1.6	106	58.6	−27	34.5	97	32	65	16.85	+ 0.58	81	85,108	nw.	52	w.	133	150	82	5.1
Huron, S. Dak	28.59	30.01	− .03	43.8	+ 1.2	103	57.0	−33	30.5	101	30	66	17.08	− 5.23	98	120,629	nw.	65	nw.	113	160	92	5.1
Northern Slope.																							
Havre, Mont	27.33	29.98	− .03	39.8	− 1.3	96	52.2	−34	27.3	89	25	63	10.94	− 3.40	89	83,542	sw.	50	nw.	134	146	85	4.9
Miles City, Mont	27.46	29.99	.....	43.0	− 1.2	101	55.4	−32	30.5	94	30	65	12.74	+ 0.03	86	59,780	w.	47	w.	153	148	64	4.8
Helena, Mont	25.84	30.03	+ .05	42.8	− 0.5	94	53.1	−17	32.6	82	25	55	10.69	− 1.97	84	67,892	sw.	46	sw.	158	102	105	4.7
Rapid City, S. Dak	26.50	29.99	− .03	45.3	− 0.8	100	56.8	−34	33.7	96	28	57	15.48	− 2.42	92	85,476	w.	52	nw.	101	166	98	5.6
Cheyenne, Wyo	24.00	30.03	.00	43.7	− 1.2	92	55.5	−30	31.8	78	26	56	14.76	+ 3.03	83	102,267	nw.	60	nw.	111	196	58	4.7
Lander, Wyo	24.63	30.07	+ .03	41.0	− 1.6	91	55.6	−38	26.5	92	22	58	17.26	+ 5.48	62	35,755	sw.	48	sw.*	132	178	55	4.4
North Platte, Nebr	27.06	30.04	.00	48.1	− 0.4	101	61.0	−23	35.3	92	34	66	14.58	− 4.27	58	86,406	w.	53	nw.	141	166	58	4.6
Middle Slope.																							
Denver, Colo	24.73	30.03	+ .02	48.8	− 0.9	96	61.3	−15	36.2	78	26	50	16.12	+ 1.79	81	68,037	s.	60	nw.	150	163	52	4.4
Pueblo, Colo	25.27	30.03	+ .02	49.8	− 2.2	96	64.6	−24	35.2	92	25	48	17.47	+ 5.17	83	65,330	nw.	54	n.	176	118	71	4.2
Concordia, Kans	28.54	30.04	− .02	53.3	+ 1.3	104	64.9	−17	41.7	95	37	63	17.15	−11.71	78	70,501	s.	42	s.	194	103	68	4.0
Dodge City, Kans	27.40	30.01	+ .01	53.1	− 0.5	100	65.2	−14	41.0	88	36	63	20.31	+ 0.17	74	103,182	se.	64	nw.	191	122	52	3.9
Wichita, Kans	28.50	30.02	.00	55.5	− 0.1	101	66.3	−13	44.7	84	42	68	26.46	− 4.68	78	80,833	s.	49	n.	191	84	90	4.1
Oklahoma, Okla	28.75	30.06	.....	57.9	− 1.5	100	68.3	− 8	47.5	77	46	73	32.49	− 0.80	86	88,789	s.	52	n.	221	81	63	3.6
Southern Slope.																							
Abilene, Tex	28.24	30.06	− .02	61.4	− 2.3	100	71.7	− 4	51.0	76	45	65	35.30	+ 7.22	85	83,516	s.	56	nw.	133	125	107	4.8
Amarillo, Tex	26.27	30.03	.....	53.4	.....	95	65.0	− 7	41.9	78	35	61	24.79	.....	102	145,568	s.	84	nw.	141	119	105	4.8
Southern Plateau.																							
El Paso, Tex	26.20	29.99	.00	62.2	− 1.8	100	73.2	8	49.3	68	31	42	10.20	− 0.21	57	97,279	nw.	78	w.	182	135	48	3.5
Santa Fe, N. Mex	23.29	30.02	.00	47.3	− 2.0	87	57.5	−11	37.1	65	22	45	20.24	+ 6.32	101	61,055	se.	45	sw.	197	118	50	3.9
Yuma, Ariz	29.75	29.89	− .03	72.4	0.0	114	86.7	30	58.0	59	42	41	1.33	− 1.73	8	60,231	n.	46	nw.	298	57	10	1.6
Independence, Cal	30.02	29.96	.....	58.0	.....	102	71.1	16	44.8	58	23	33	4.17	.....	22	74,532	nw.	53	n.	212	84	69	3.2
Middle Plateau.																							
Carson City, Nev	25.31	30.08	.....	48.3	− 1.3	95	62.8	− 4	33.7	67	24	42	11.56	− 1.19	53	.....	w.	....	.....	285	25	55	2.7
Winnemucca, Nev	25.68	30.06	+ .04	47.1	− 1.5	98	61.1	−14	33.2	70	19	42	6.84	− 1.60	68	85,774	sw.	68	sw.	181	110	74	3.9
Salt Lake City, Utah	25.66	30.07	+ .02	50.2	− 1.4	97	60.7	0	39.8	61	31	54	11.95	− 4.70	86	54,134	se.	48	s.	138	89	138	5.6
Northern Plateau.																							
Baker City, Oreg	26.47	30.01	.00	45.2	+ 0.4	94	57.0	− 3	33.5	60	29	59	12.00	− 3.15	84	50,578	se.	38	se.	153	104	108	4.5
Idaho Falls, Idaho	25.26	30.10	.....	41.7	0.0	94	55.5	−32	28.0	72	26	62	9.30	− 5.68	79	67,420	s.	52	s.	141	104	120	5.1
Spokane, Wash	28.00	30.05	+ .03	48.0	+ 0.2	95	58.1	8	38.0	59	30	60	13.46	− 5.43	98	53,851	sw.	42	sw.	81	126	158	6.2
Walla Walla, Wash	28.97	30.06	+ .02	53.1	− 0.8	104	63.4	11	42.9	56	38	58	14.89	− 2.89	87	53,294	s.	50	sw.	139	160	66	4.8
North Pacific Coast.																							
East Clallam, Wash	.....	.....	.....	47.2	.....	93	53.8	24	40.6	53	.....	.....	90.35	.....	174	.....	w.	....	... ...	119	36	210	....
Fort Canby, Wash	29.96	30.06	+ .04	50.5	− 0.3	90	55.4	31	45.5	43	45	86	60.39	+ 0.05	165	115,966	n.	78	se.	78	87	200	6.7
Neah Bay, Wash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Angeles, Wash	30.00	30.08	+ .03	47.3	+ 0.8	88	53.7	22	40.9	50	41	80	24.07	− 6.62	125	49,813	s.	38	w.	116	118	131	5.6
Port Crescent, Wash	.....	.....	.....	46.5	.....	90	55.5	18	37.6	57	.....	.....	40.50	.....	109	.....	e.	....	.....	130	126	109	....
Pysht, Wash	.....	.....	.....	47.7	.....	86	55.9	22	39.4	48	.....	.....	67.58	.....	181	.....	w.	....	.....	101	39	212	....
Seattle, Wash	29.91	30.04	.....	51.2	.....	90	58.1	27	44.3	48	41	74	29.69	.....	136	47,826	s.	42	sw.	101	90	174	6.3
Tatoosh Island, Wash	29.94	30.04	+ .03	48.4	− 0.5	78	52.4	30	44.4	37	44	85	92.95	+ 6.69	205	114,133	e.	72	e.	76	56	233	7.3
Astoria, Oreg	.....	.....	.....	51.4	+ 0.5	91	57.7	27	45.1	45	.....	.....	70.75	+ 6.09	184	.....	w.	....	.....	116	88	166	....
Portland, Oreg	29.89	30.07	+ .01	52.0	− 1.1	97	60.2	25	43.9	53	41	71	30.76	−18.58	135	74,592	nw.	53	se.	104	155	106	5.4
Roseburg, Oreg	29.47	30.04	− .04	52.3	− 0.9	98	62.6	20	42.1	57	42	74	29.92	− 4.67	120	32,506	nw.	36	sw.	165	86	114	4.6
Middle Pacific Coast.																							
Eureka, Cal	30.01	30.07	+ .01	50.9	− 0.5	76	57.0	30	44.8	44	46	87	41.52	− 3.84	109	55,368	nw.	44	nw.	105	167	93	5.3
Red Bluff, Cal	29.65	30.00	.00	62.2	− 0.2	108	73.5	28	51.0	57	41	56	22.57	− 3.70	60	56,868	nw.	40	n.	231	61	73	3.2
Sacramento, Cal	29.93	30.01	.00	60.2	− 0.1	102	70.9	38	49.4	52	46	67	17.38	− 4.19	56	77,242	sw.	48	se.*	210	91	64	3.4
San Francisco, Cal	29.88	30.04	+ .01	55.6	− 1.0	89	61.3	38	49.8	41	48	81	17.13	− 7.51	65	94,058	w.	44	s.	180	124	61	4.2
Point Reyes Light, Cal	.....	.....	.....	52.1	− 0.3	82	59.0	34	45.1	43	.....	.....	23.06	− 7.50	73	141,963	nw.	120	nw.	99	64	199	....
South Pacific Coast.																							
Fresno, Cal	29.63	29.98	− .01	62.5	− 1.0	110	75.5	26	49.4	62	41	57	10.39	+ 1.39	43	48,419	nw.	28	w.*	225	73	67	3.2
Los Angeles, Cal	29.64	29.99	.00	61.7	− 0.8	100	72.9	34	50.6	58	48	73	12.55	− 5.85	42	30,053	w.	26	nw.*	142	172	51	3.8
San Diego, Cal	29.92	30.00	− .01	60.5	− 0.7	90	67.8	34	53.3	47	51	75	11.33	+ 0.35	42	46,369	w.	26	ne.	235	83	47	3.6
San Luis Obispo, Cal	29.81	30.03	....	58.5	.....	99	70.1	28	47.0	65	45	71	17.49	.....	46	45,628	nw.	33	nw.	207	97	61	3.7

* More than one direction. † These are "apparent pressures," as defined on page 489.

TABLE II.—*Annual meteorological summary, Canadian stations*, 1895.

Stations.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.	Stations.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.			Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.	
	Inches.	*Inches.*	*Inches.*	°	°	*Inches.*	*Inches.*			*Inches.*	*Inches.*	*Inches.*	°	°	*Inches.*	*Inches.*	
St Johns, N. F	29.79	29.94	+ .02	42.0	+ 0.6	56.96	.....	n.	Saugeen, Ont	29.28	30.01	+ .01	41.7	+ 0.5	32.95	−1.43	w.
Sydney, C. B. I	29.90	29.96	+ .03	42.9	+ 2.1	46.73	−5.61	sw.	Parry Sound, Ont	29.28	29.99	− .01	39.8	+ 1.1	38.14	+0.82	w.
Halifax, N. S	29.85	29.98	+ .02	44.2	+ 2.0	62.07	+6.63	nw.	Port Arthur, Ont	29.24	29.96	− .03	34.6	+ 1.2	22.47	−1.57	w.
Grand Manan, N. B	29.91	29.96	.....	43.5	.....	46.63	+2.01	w.	Winnipeg, Man	29.12	29.98	− .03	32.7	+ 1.7	18.42	−5.03	nw.
Yarmouth, N. S	29.91	29.99	− .01	43.9	+ 0.8	48.81	+2.68	s.	Minnedosa, Man	28.09	29.94	− .05	31.8	+ 2.3	15.34	−2.39	nw.
St. Andrews, N. B	.....	.....	.....	42.0	.....	40.27	+0.25	nw.	Qu'Appelle, Assin	27.66	29.97	− .02	31.8	− 0.1	15.29	+0.35	nw.
Charlottetown, P. E. I	29.90	29.94	.....	42.5	.....	41.64	−0.14	w.	Medicine Hat, Assin	27.63	29.97	.00	38.7	− 0.8	14.13	+3.36	w.
Chatham, N. B	29.92	29.94	− .01	39.6	+ 3.1	37.61	−6.35	w.	Swift Current, Assin	27.35	29.98	− .02	35.2	− 0.3	12.33	−3.52	w.
Father Point, Que	29.90	29.93	− .01	36.4	+ 2.1	31.49	+1.69	w.	Calgary, Alberta	26.35	29.94	− .04	35.6	− 0.3	15.12	+1.84	w.
Quebec, Que	29.62	29.96	− .01	39.1	+ 1.6	35.70	−7.08	sw.	Prince Albert, Sask	28.40	29.96	.....	30.9	.....	14.14	.....	nw.
Montreal, Que	29.76	29.97	− .01	41.9	+ 1.1	39.87	+1.06	sw.	Edmonton, Alberta	27.59	29.97	+ .01	35.3	− 0.3	14.68	+0.87	nw.
Rockliffe, Ont	29.43	29.95	− .08	36.8	+ 1.3	37.80	−3.25	nw.	Battleford, Sask	28.17	29.95	.....	32.4	.....	12.01	.....	nw.
Kingston, Ont	29.68	30.00	+ .02	42.6	+ 0.1	36.08	−7.91	sw.	Spences Bridge, B. C	29.15	29.97	.....	48.3	.....	7.18	.....	w.
Toronto, Ont	29.63	30.02	.00	43.2	− 0.2	38.05	+2.70	w.	Hamilton, Bermuda	29.96	30.12	+ .03	70.3	.....	63.11	.....	s.
White River, Ont	28.60	29.99	.....	30.9	− 0.1	26.08	+2.75	s.	Esquimalt, B. C	30.00	30.03	.....	47.2	.....	32.73	.....	sw.
Port Stanley, Ont	29.38	30.03	.00	43.6	.....	30.94	−3.23	w.									

TABLE III.—*Accumulated departures of average monthly temperature during* 1895.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual average.
New England	+ 1.0	− 4.2	− 4.6	− 4.6	− 3.2	− 1.7	− 3.6	− 2.3	+ 0.1	− 2.4	− 0.3	+ 2.1	+ 0.18
Middle Atlantic States	− 1.8	−11.5	−12.0	−11.6	−12.1	− 9.7	−12.8	−10.1	− 5.5	− 9.7	− 8.8	− 7.3	− 0.61
South Atlantic States	− 1.1	−13.8	−14.1	−14.7	−17.2	−16.7	−18.3	−16.9	−13.4	−16.2	−16.5	−17.7	− 1.48
Florida Peninsula	− 0.4	− 8.7	− 8.8	−11.4	−11.2	−11.7	−12.8	−13.0	−12.8	−13.8	−13.5	−16.6	− 1.36
East Gulf States	− 1.3	−14.6	−15.0	−16.7	−18.3	−18.4	−19.0	−18.7	−14.9	−17.4	−18.1	−20.6	− 1.72
West Gulf States	+ 0.4	−11.8	−12.7	−13.3	−15.6	−16.4	−17.9	−17.7	−14.2	−17.5	−19.9	−20.6	− 1.72
Ohio Valley and Tennessee	− 3.2	−15.6	−17.0	−15.4	−16.2	−13.5	−15.9	−13.3	− 8.0	−13.1	−13.4	−13.1	− 1.09
Lower Lake Region	− 2.7	−10.6	−14.1	−11.7	− 8.9	− 4.8	− 7.5	− 5.5	− 1.5	− 7.2	− 7.8	− 6.9	− 0.58
Upper Lake Region	− 1.9	− 6.4	− 8.5	− 5.3	− 1.6	+ 1.5	− 1.1	+ 0.7	+ 4.9	+ 0.5	− 1.0	+ 0.2	+ 0.02
North Dakota	+ 2.4	− 1.7	+ 1.5	+10.6	+11.7	+ 7.8	+ 5.4	+ 4.7	+ 6.2	+ 5.0	+ 0.2	+ 3.7	+ 0.31
Upper Mississippi Valley	− 2.9	−10.5	−10.3	− 6.0	− 4.2	− 2.2	− 4.5	− 2.1	+ 3.4	− 0.9	− 3.0	− 1.9	− 0.16
Missouri Valley	− 1.4	− 5.6	− 3.6	+ 1.9	+ 3.8	+ 2.6	0.0	+ 1.1	+ 5.9	+ 3.1	+ 0.9	+ 2.4	+ 0.20
Northern Slope	0.0	− 3.8	− 4.8	− 1.0	− 1.5	− 5.9	− 9.0	− 9.9	−10.0	− 9.8	−12.0	−11.9	− 0.99
Middle Slope	+ 1.5	− 5.8	− 6.4	− 3.0	− 2.1	− 4.3	− 8.0	− 7.8	− 2.7	− 4.6	− 6.0	− 6.3	− 0.52
Abilene (Southern Slope)	+ 1.1	−13.8	−14.1	−12.6	−14.4	−15.5	−19.4	−18.9	−13.7	−18.3	−21.6	−23.1	− 1.92
Southern Plateau	+ 0.8	− 1.8	− 2.1	− 1.9	− 2.8	− 5.0	− 8.1	− 9.0	− 7.1	− 6.3	− 8.2	−12.4	− 1.03
Middle Plateau	− 0.5	− 3.2	− 4.5	− 4.9	− 5.0	− 6.6	− 8.6	− 9.3	−12.1	−10.1	−12.4	−17.1	− 1.42
Northern Plateau	+ 3.3	+ 8.7	+ 9.5	+11.3	+ 2.8	+ 8.5	+ 6.0	+ 5.0	+ 1.0	+ 3.5	+ 2.4	+ 0.8	+ 0.07
North Pacific	+ 0.1	+ 3.4	+ 2.4	+ 1.5	+ 0.4	+ 0.4	+ 0.2	− 0.5	− 3.0	− 2.3	− 3.7	− 4.0	− 0.33
Middle Pacific	− 0.5	+ 2.2	+ 0.3	− 0.5	− 2.2	− 1.3	− 1.8	− 2.7	− 4.9	− 6.0	− 6.5	− 9.5	− 0.79
Southern Pacific	− 0.2	+ 1.7	+ 0.1	− 1.5	− 1.5	− 1.9	− 4.4	− 6.7	− 8.9	− 7.9	− 8.7	−10.0	− 0.83

TABLE IV.—*Accumulated departures of total monthly precipitation during* 1895.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual average.
New England	− 0.30	− 3.10	− 3.90	− 3.00	− 3.10	− 4.10	− 3.20	− 3.60	− 5.30	− 6.60	− 4.80	− 5.30	− 5.30
Middle Atlantic States	+ 1.00	− 1.00	− 1.90	− 0.30	− 0.40	− 1.50	− 2.70	− 4.90	− 7.50	− 8.40	− 8.80	− 9.10	− 9.10
South Atlantic States	+ 1.90	+ 1.50	+ 2.50	+ 4.40	+ 4.20	+ 2.90	+ 3.20	− 2.40	− 0.10	− 2.80	− 2.40	− 3.70	− 3.70
Florida Peninsula	− 0.20	+ 0.20	− 0.50	+ 1.40	+ 0.50	− 0.70	− 2.10	− 2.70	− 3.30	+ 0.50	+ 0.10	+ 0.70	+ 0.70
East Gulf States	− 0.40	− 2.20	− 1.30	− 2.20	− 1.00	− 0.20	− 2.00	− 0.80	− 4.30	− 5.10	− 7.90	− 8.00	− 8.60
West Gulf States	− 1.30	− 2.60	− 2.50	− 5.30	− 3.90	− 2.80	− 1.10	− 2.00	− 5.40	− 6.60	− 6.10	− 6.70	− 6.70
Ohio Valley and Tennessee	+ 0.80	− 2.40	− 3.60	− 4.80	− 6.20	− 7.30	− 7.10	− 8.70	− 9.70	−11.40	−11.40	−11.00	−11.00
Lower Lake Region	+ 0.20	− 1.40	− 2.60	− 3.10	− 3.80	− 6.10	− 6.50	− 6.20	− 7.10	− 8.60	− 7.40	− 5.80	− 5.80
Upper Lake Region	+ 0.60	− 0.40	− 1.70	− 2.50	− 2.60	− 4.10	− 5.70	− 5.90	− 6.20	− 8.40	− 8.00	− 7.00	− 7.10
North Dakota	0.00	− 0.20	− 0.80	− 0.40	+ 0.20	+ 1.00	+ 0.90	+ 0.10	− 0.70	− 1.90	− 0.80	− 1.10	− 1.10
Upper Mississippi Valley	− 0.30	− 1.80	− 2.70	− 3.80	− 5.10	− 6.60	− 6.40	− 6.10	− 6.50	− 9.00	− 8.80	− 7.80	− 7.80
Missouri Valley	− 0.30	− 1.20	− 1.20	− 2.40	− 4.00	− 3.90	− 3.20	− 2.60	− 3.30	− 5.20	− 5.00	− 2.90	− 2.90
Northern Slope	+ 0.10	+ 0.30	+ 0.40	+ 0.70	0.00	+ 0.90	+ 0.30	− 0.20	− 0.40	− 0.70	− 0.20	− 0.40	− 0.40
Middle Slope	− 0.30	+ 0.30	0.00	− 1.50	− 2.90	− 2.20	− 0.90	− 0.30	− 1.30	− 1.60	− 1.60	− 1.60	− 1.60
Abilene (Southern Slope)	+ 0.20	+ 1.40	0.00	− 2.10	− 4.50	+ 1.20	+ 4.20	+ 3.90	+ 5.00	+ 6.10	+ 5.80	+ 7.20	+ 7.20
Southern Plateau	+ 0.30	0.00	− 0.40	− 0.70	+ 0.40	+ 0.20	+ 0.90	+ 1.10	+ 0.40	+ 0.50	+ 0.80	+ 0.40	+ 0.40
Middle Plateau	+ 1.10	+ 1.00	+ 0.20	− 0.50	− 0.30	− 0.60	0.60	− 0.90	− 1.10	− 1.60	− 1.80	− 2.60	− 2.60
Northern Plateau	0.00	− 1.40	− 1.80	− 2.40	− 2.10	− 3.10	− 3.30	− 3.40	− 2.60	− 4.10	− 4.20	− 4.50	− 4.50
North Pacific	− 0.90	− 4.00	− 3.60	− 2.00	+ 1.20	− 0.30	− 0.50	− 1.30	− 1.80	− 7.60	− 8.70	− 4.10	− 4.10
Middle Pacific	+ 2.80	+ 0.80	− 0.60	− 1.90	− 1.60	− 2.20	− 2.20	− 2.20	− 0.90	− 2.60	− 3.00	− 5.60	− 5.60
Southern Pacific	+ 3.70	+ 2.30	+ 2.80	− 2.00	− 2.10	− 2.20	− 2.20	− 2.30	− 2.40	− 2.80	− 3.20	− 5.40	− 4.40

TABLE V.—*Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the year* 1895.

Stations.	Component direction from—				Resultant.	
	N.	S.	E.	W.	Direction from—	Duration.
New England.	*Hours.*	*Hours.*	*Hours.*	*Hours.*	°	*Hours.*
Eastport, Me	208	240	134	296	s. 77 w.	177
Portland, Me	199	248	102	331	s. 78 w.	234
Northfield, Vt	237	372	41	196	s. 49 w.	205
Boston, Mass	212	191	111	363	n. 85 w.	254
Nantucket, Mass	277	148	192	280	n. 34 w.	156
Woods Hole, Mass.*	76	169	51	128	s. 40 w.	120
Block Island, R. I	231	196	171	355	n. 78 w.	188
New Haven, Conn	285	226	106	245	n. 67 w.	151
Middle Atlantic States.						
Albany, N. Y	215	306	84	228	s. 36 w.	236
New York, N. Y	253	204	156	286	n. 69 w.	139
Harrisburg, Pa	185	147	214	278	n. 59 w.	74
Philadelphia, Pa	268	199	153	208	n. 59 w.	134
Baltimore, Md	255	193	160	264	n. 59 w.	121
Washington, D. C	275	226	143	229	n. 60 w.	99
Lynchburg, Va	213	217	220	259	s. 85 w.	49
Norfolk, Va	333	238	287	183	n. 45 e.	148
South Atlantic States.						
Charlotte, N. C	152	297	278	196	s. 29 e.	166
Hatteras, N. C	284	212	168	296	n. 39 w.	92
Kittyhawk, N. C	261	221	223	238	n. 21 w.	43
Raleigh, N. C	277	250	115	224	n. 80 w.	110
Wilmington, N. C	245	229	187	152	n. 65 e.	38
Charleston, S. C	222	248	195	237	s. 59 w.	49
Augusta, Ga	227	202	207	232	n. 45 w.	35
Savannah, Ga	217	278	169	224	s. 42 w.	83
Jacksonville, Fla	230	226	234	212	n. 60 e.	26
Florida Peninsula.						
Jupiter, Fla	206	242	246	196	s. 52 e.	63
Key West, Fla	245	151	415	61	n. 76 e.	306
Tampa, Fla	312	185	241	193	n. 15 e.	183
Eastern Gulf States.						
Atlanta, Ga	241	158	232	289	s. 34 w.	101
Pensacola, Fla	259	220	199	238	n. 45 w.	55
Mobile, Ala	312	216	118	209	n. 44 w.	132
Montgomery, Ala	245	208	253	192	n. 60 e.	71
Meridian, Miss	262	247	231	163	n. 78 e.	70
Vicksburg, Miss	209	258	276	154	s. 69 e.	134
New Orleans, La	214	270	232	157	s. 60 e.	110
Western Gulf States.						
Shreveport, La	195	313	245	154	s. 39 e.	150
Fort Smith, Ark	159	153	383	127	n. 89 e.	256
Little Rock, Ark	225	257	184	213	s. 42 w.	43
Corpus Christi, Tex	192	308	368	76	s. 68 e.	311
Galveston, Tex	167	350	237	145	s. 27 e.	205
Palestine, Tex	186	345	196	149	s. 16 e.	163
San Antonio, Tex	254	252	291	62	n. 89 e.	228
Ohio Valley and Tennessee.						
Chattanooga, Tenn	215	190	180	257	n. 78 w.	79
Knoxville, Tenn	263	139	236	247	n. 10 w.	126
Memphis, Tenn	228	236	235	177	s. 82 e.	58
Nashville, Tenn	251	234	149	273	n. 83 w.	125
Lexington, Ky	154	302	175	255	s. 28 w.	168
Louisville, Ky	221	305	156	183	s. 18 w.	87
Indianapolis, Ind	219	271	173	255	s. 58 w.	96
Cincinnati, Ohio	202	268	226	221	s. 4 e.	66
Columbus, Ohio	190	265	198	234	s. 26 w.	84
Pittsburg, Pa	210	225	162	281	s. 83 w.	118
Parkersburg, W. Va	155	263	236	185	s. 26 e.	120
Lower Lake Region.						
Buffalo, N. Y	165	224	147	372	s. 75 w.	232
Oswego, N. Y	147	323	135	269	s. 38 w.	221
Rochester, N. Y	127	297	120	376	s. 56 w.	307
Erie, Pa	160	295	196	300	s. 52 w.	220
Cleveland, Ohio	170	204	245	119	s. 75 e.	130
Sandusky, Ohio	153	253	190	281	s. 42 w.	135
Toledo, Ohio	173	198	169	339	s. 82 w.	170
Detroit, Mich	206	243	165	306	s. 78 w.	175
Upper Lake Region.						
Alpena, Mich	198	243	144	330	s. 76 w.	182
Grand Haven, Mich	225	223	202	259	n. 88 w.	57
Marquette, Mich	272	209	107	302	n. 36 w.	328
Port Huron, Mich	186	336	141	227	s. 51 w.	240
Sault Ste. Marie, Mich	204	229	242	262	s. 39 w.	32
Chicago, Ill	221	146	238	269	s. 82 w.	134
Upper Lake Region—Cont'd.						
Milwaukee, Wis	202	234	169	289	s. 75 w.	134
Green Bay, Wis	197	225	124	206	s. 33 w.	152
Duluth, Minn	300	159	168	318	n. 47 w.	206
North Dakota.						
Moorhead, Minn	290	238	102	225	n. 67 w.	133
St. Vincent, Minn	283	216	126	236	n. 60 w.	129
Bismarck, N. Dak	336	143	148	260	n. 30 w.	223
Williston, N. Dak	243	200	123	296	n. 76 w.	178
Upper Mississippi Valley.						
St. Paul, Minn	164	261	209	301	s. 44 w.	134
La Crosse, Wis	204	336	87	185	s. 36 w.	164
Davenport, Iowa	144	253	186	287	s. 42 w.	150
Des Moines, Iowa	252	246	150	241	n. 86 w.	91
Keokuk, Iowa	214	279	136	279	s. 65 w.	157
Cairo, Ill	261	293	151	171	s. 32 w.	38
Springfield, Ill	217	292	118	251	s. 60 w.	153
Hannibal, Mo	186	281	151	265	s. 50 w.	148
St. Louis, Mo	227	285	170	198	s. 26 w.	64
Missouri Valley.						
Columbia, Mo.*	98	180	128	109	s. 31 e.	37
Kansas City, Mo	230	317	216	152	s. 36 e.	110
Springfield, Mo	205	320	227	150	s. 31 e.	147
Omaha, Nebr	260	264	195	187	s. 63 e.	9
Sioux City, Iowa	271	282	164	181	s. 57 w.	30
Pierre, S. Dak	254	166	239	211	n. 18 e.	92
Huron, S. Dak	255	242	200	233	n. 69 w.	36
Northern Slope.						
Havre, Mont	243	144	133	375	n. 68 w.	282
Miles City, Mont	205	231	155	251	s. 75 w.	100
Helena, Mont	138	236	55	470	s. 77 w.	438
Rapid City, S. Dak	234	180	126	315	n. 74 w.	198
Cheyenne, Wyo	288	166	58	382	n. 69 w.	346
Lander, Wyo	184	264	104	335	s. 71 w.	244
North Platte, Nebr	182	245	155	300	s. 66 w.	158
Middle Slope.						
Denver, Colo	232	285	182	218	s. 46 w.	77
Pueblo, Colo	208	156	202	259	n. 22 w.	148
Concordia, Kans	229	316	130	162	s. 30 w.	93
Dodge City, Kans	270	286	216	115	s. 81 e.	112
Wichita, Kans	245	332	173	98	s. 41 e.	114
Oklahoma, Okla	240	332	152	123	s. 14 e.	116
Southern Slope.						
Abilene, Tex	206	349	190	137	s. 21 e.	152
Amarillo, Tex	197	374	102	147	s. 14 w.	182
Southern Plateau.						
El Paso, Tex	246	91	280	291	n. 4 w.	154
Santa Fe, N. Mex	217	264	265	192	s. 57 e.	87
Yuma, Ariz	238	179	160	241	n. 36 w.	141
Independence, Cal	291	177	111	346	n. 64 w.	261
Middle Plateau.						
Carson City, Nev	173	218	143	303	s. 74 w.	166
Winnemucca, Nev	221	187	227	254	n. 39 w.	43
Salt Lake City, Utah	197	256	234	236	s. 2 w.	59
Northern Plateau.						
Baker City, Oreg	184	337	154	175	s. 8 w.	154
Idaho Falls, Idaho	244	335	71	217	s. 61 w.	167
Spokane, Wash	162	305	210	211	s.	143
Walla Walla, Wash	106	303	123	194	s. 20 w.	209
North Pacific Coast Region.						
Fort Canby, Wash	264	207	196	184	n. 12 e.	58
Port Angeles, Wash	59	358	137	277	s. 25 w.	330
Seattle, Wash	233	307	172	134	s. 27 e.	84
Tatoosh Island, Wash	27	290	307	241	s. 16 e.	242
Portland, Oreg	239	265	166	262	s. 75 w.	100
Roseburg, Oreg	286	165	183	243	n. 27 w.	135
Middle Pacific Coast Region.						
Eureka, Cal	216	219	201	266	s. 87 w.	65
Red Bluff, Cal	307	251	350	196	n. 70 e.	164
Sacramento, Cal	184	385	153	198	s. 13 w.	205
San Francisco, Cal	124	162	64	484	s. 85 w.	422
South Pacific Coast Region.						
Fresno, Cal	280	78	164	383	n. 48 w.	298
Los Angeles, Cal	198	100	188	354	n. 61 w.	192
San Diego, Cal	263	121	116	370	n. 61 w.	291
San Luis Obispo, Cal	330	143	70	299	n. 49 w.	301

*From observations at 8 p. m. only.

TABLE VI.—*Total number of thunderstorms reported during* 1895.

State.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Alabama	8	3	47	40	50	77	60	64	28	5	0	0	382
Arizona	1	3	1	6	19	5	41	64	21	22	7	0	190
Arkansas	19	0	37	40	64	66	62	53	26	7	8	11	393
California	14	8	11	15	19	4	6	13	14	44	2	7	157
Colorado	0	8	8	36	62	168	220	192	43	23	5	0	765
Connecticut	0	0	2	33	16	61	62	65	32	1	13	1	286
Delaware	1	0	5	7	5	23	14	17	9	0	4	0	85
Dist. of Columbia	0	0	1	1	3	11	7	6	3	0	0	0	32
Florida	25	15	39	73	156	143	266	194	156	8	17	2	1,094
Georgia	11	1	47	64	68	60	44	54	9	5	5	3	371
Idaho	0	1	2	6	28	19	51	41	18	1	1	0	168
Illinois	29	1	32	67	143	130	251	121	143	13	2	23	955
Indiana	12	0	10	32	33	46	78	69	51	8	0	0	339
Indian Territory	1	0	4	3	7	8	3	7	2	3	1	3	42
Iowa	22	0	19	82	142	161	160	148	99	4	2	22	861
Kansas	2	2	30	47	71	83	96	137	26	3	1	21	519
Kentucky	7	0	20	29	41	22	39	35	10	4	5	0	212
Louisiana	52	7	45	37	151	153	189	178	88	11	6	16	933
Maine	0	0	0	9	24	29	9	44	16	2	1	0	134
Maryland	6	0	18	44	42	130	68	76	35	0	10	5	434
Massachusetts	0	2	16	72	55	117	137	95	136	4	15	1	640
Michigan	7	0	15	3	75	55	49	79	98	2	0	4	405
Minnesota	1	0	10	112	154	181	116	159	136	2	12	3	1,086
Mississippi	27	1	56	48	61	116	99	94	49	11	4	2	578
Missouri	32	1	94	89	243	260	301	199	105	22	6	39	1,391
Montana	0	1	2	8	10	40	45	11	11	1	2	1	132
Nebraska	0	0	20	83	53	112	84	144	46	0	6	9	557
Nevada	0	5	3	17	24	29	31	45	7	27	0	0	188
New Hampshire	0	0	1	8	20	47	25	40	33	0	0	0	174
New Jersey	2	0	14	30	43	149	153	133	46	0	24	1	595
New Mexico	0	2	1	4	6	30	39	56	4	5	1	0	148
New York	0	0	11	17	75	116	85	166	81	2	7	4	564
North Carolina	20	0	20	65	77	123	147	202	54	0	6	1	715
North Dakota	0	0	0	11	11	34	28	41	12	0	1	0	138
Ohio	32	1	96	116	236	191	176	208	173	36	2	2	1,360
Oklahoma	0	0	10	7	5	32	14	25	2	2	3	6	106
Oregon	0	0	4	9	11	8	13	34	16	0	7	9	111
Pennsylvania	9	0	40	18	83	196	115	180	98	3	2	8	752
Rhode Island	0	0	1	11	4	13	15	9	10	0	1	0	64
South Carolina	12	1	54	70	65	101	104	140	26	5	9	1	588
South Dakota	0	0	6	35	43	70	60	45	18	3	9	0	289
Tennessee	14	0	31	67	79	96	122	118	58	4	2	2	593
Texas	8	8	37	65	102	135	82	74	37	21	9	26	604
Utah	1	2	3	8	17	21	36	38	11	10	1	0	148
Vermont	0	0	2	9	12	35	30	31	31	1	0	0	151
Virginia	4	0	10	33	49	76	33	55	18	0	7	7	292
Washington	3	0	10	18	8	7	20	16	5	0	5	5	97
West Virginia	0	0	23	39	35	58	45	44	21	0	2	3	270
Wisconsin	7	0	5	32	166	140	109	147	103	4	0	7	720
Wyoming	1	0	1	3	3	4	9	10	1	2	0	0	34

TABLE VII.—*Number of days on which thunderstorms were reported.*

Alabama	4	3	12	12	19	26	25	27	12	2	0	0	142
Arizona	1	2	1	3	9	2	21	25	12	6	6	0	88
Arkansas	7	0	13	14	14	21	24	19	12	4	5	4	137
California	3	1	5	7	10	2	5	8	8	10	2	3	64
Colorado	0	5	4	11	19	27	28	28	14	9	3	0	148
Connecticut	0	0	1	6	5	13	10	12	9	1	1	1	59
Delaware	1	0	1	4	5	10	11	8	6	0	1	0	47
Dist. of Columbia	0	0	1	1	3	11	7	6	3	0	0	0	32
Florida	14	8	9	19	24	23	31	31	25	6	8	2	200
Georgia	5	1	10	16	18	20	24	23	8	1	5	1	132
Idaho	0	1	1	4	12	10	17	15	10	1	1	0	72
Illinois	3	1	6	12	19	19	24	20	20	5	2	6	137
Indiana	5	0	4	12	12	10	15	15	12	3	0	0	88
Indian Territory	1	0	3	3	5	6	2	7	2	3	1	2	35
Iowa	2	0	4	18	23	21	17	23	15	2	2	2	129
Kansas	1	1	8	16	20	21	19	23	11	3	1	5	129
Kentucky	4	0	6	12	12	12	14	19	4	2	1	0	86
Louisiana	15	2	10	12	23	30	31	31	22	5	2	7	190
Maine	0	0	0	4	10	12	5	13	5	1	1	0	51
Maryland	2	0	6	16	10	20	15	15	7	0	3	2	90
Massachusetts	0	2	2	8	11	17	16	16	9	1	2	1	73
Michigan	3	0	5	13	15	17	17	19	22	2	0	2	116
Minnesota	1	0	3	14	20	28	20	26	22	1	4	3	142
Mississippi	8	1	12	13	18	25	28	28	19	4	4	2	162
Missouri	6	1	12	18	25	26	28	25	17	5	3	5	171
Montana	0	1	1	4	6	2	23	9	6	1	1	1	74
Nebraska	0	0	3	17	13	22	18	22	12	0	2	5	114
Nevada	0	4	3	5	9	8	16	16	5	7	0	0	73
New Hampshire	0	0	1	4	5	15	10	15	4	0	0	0	54
New Jersey	2	0	2	6	11	22	20	17	10	0	4	1	95
New Mexico	0	2	1	3	6	16	20	28	3	3	1	0	83
New York	0	0	2	7	12	2	17	16	15	2	2	1	95
North Carolina	7	0	11	16	19	22	25	26	14	0	4	1	145
North Dakota	0	0	0	9	8	17	13	15	9	0	1	0	72
Ohio	9	1	16	12	18	18	19	22	17	5	2	1	140
Oklahoma	0	0	5	3	5	14	8	12	2	1	3	2	55
Oregon	0	0	4	3	6	6	7	8	9	0	5	6	54
Pennsylvania	3	0	5	8	13	23	20	24	12	2	1	1	112
Rhode Island	0	0	1	4	4	7	6	6	6	0	1	0	35
South Carolina	5	1	12	15	15	19	24	27	12	2	6	1	139
South Dakota	0	0	2	12	13	24	19	16	10	2	1	0	99
Tennessee	4	0	4	16	21	22	23	26	17	2	2	1	138
Texas	3	5	12	13	24	25	24	26	18	8	6	11	165
Utah	1	2	2	5	10	13	18	19	5	4	1	0	80
Vermont	0	0	2	3	5	15	13	11	8	1	0	0	58
Virginia	2	0	6	11	15	17	16	22	9	0	4	3	105
Washington	2	0	5	2	5	4	8	4	3	0	3	4	40
West Virginia	0	0	8	7	12	15	13	17	8	0	1	2	83
Wisconsin	3	0	3	12	23	22	18	23	19	3	0	3	129
Wyoming	1	0	1	3	2	4	8	8	1	2	0	0	30

TABLE VIII.—*Total number of auroras reported during* 1895.

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Alabama	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0
California	0	1	0	0	0	0	0	0	0	0	1	1	3
Colorado	8	2	1	0	1	7	3	1	1	7	4	2	37
Connecticut	1	11	4	4	0	0	1	0	2	4	2	0	29
Delaware	3	3	0	0	3	4	4	1	3	3	1	1	26
Dist. of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	3	1	6	2	0	0	3	4	17	1	0	37
Illinois	1	10	0	1	2	1	1	4	11	36	19	4	90
Indiana	4	2	3	0	1	0	0	0	0	7	3	0	20
Indian Territory	0	0	0	0	0	0	0	0	0	0	0	0	0
Iowa	1	17	6	1	2	2	1	4	12	55	25	2	128
Kansas	0	4	1	3	3	4	1	0	1	8	7	0	32
Kentucky	0	2	0	0	0	0	0	1	0	0	0	1	4
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0	0
Maine	5	29	13	25	4	1	1	3	13	6	6	5	111
Maryland	0	2	3	3	0	0	0	0	2	4	4	1	18
Massachusetts	9	38	6	10	7	0	8	5	10	14	15	5	127
Michigan	2	30	18	4	1	1	1	4	4	28	20	1	106
Minnesota	15	63	40	25	2	12	3	19	50	83	52	8	372
Mississippi	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri	1	0	1	0	1	0	0	0	1	6	7	0	17
Montana	2	18	6	11	1	0	4	2	18	35	17	7	111
Nebraska	1	9	3	2	1	3	1	0	7	29	19	4	79
Nevada	6	7	3	2	1	2	1	0	0	0	2	0	24
New Hampshire	6	30	22	21	2	11	4	6	7	9	12	7	137
New Jersey	4	8	1	2	3	2	0	0	0	12	11	3	46
New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	3	29	21	14	2	3	4	1	10	32	10	0	129
North Carolina	1	0	0	0	0	0	0	0	0	0	1	1	3
North Dakota	14	34	32	30	12	6	8	14	47	45	28	18	288
Ohio	6	18	3	2	7	7	10	6	7	53	7	0	126
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	1	0	0	0	0	1	0	0	0	2
Pennsylvania	4	11	0	3	1	0	0	0	0	7	0	1	27
Rhode Island	0	7	0	1	0	0	0	0	0	3	0	0	11
South Carolina	0	0	0	0	0	0	0	1	0	0	0	0	1
South Dakota	2	13	10	8	0	0	2	6	13	23	20	2	99
Tennessee	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermont	5	16	7	6	1	0	3	1	2	9	6	4	60
Virginia	2	0	1	0	1	0	0	0	0	3	1	1	5
Washington	1	5	5	11	6	7	3	1	3	10	3	0	55
West Virginia	0	0	0	0	0	0	0	0	1	0	0	0	1
Wisconsin	13	58	29	22	5	4	0	14	24	61	41	6	277
Wyoming	2	0	0	0	0	0	0	0	0	3	3	0	8

TABLE IX.—*Total number of days on which auroras occurred.*

Alabama	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0
California	0	1	0	0	0	0	0	0	0	0	1	1	3
Colorado	8	2	1	0	1	2	3	1	1	4	3	2	28
Connecticut	1	4	2	2	0	0	1	0	2	1	2	0	15
Delaware	3	3	0	0	3	4	4	1	3	3	1	1	26
Dist. of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	3	1	3	2	0	0	3	4	7	1	0	24
Illinois	1	7	0	1	2	1	1	2	5	4	7	3	34
Indiana	3	2	3	0	1	0	0	0	3	1	0	0	13
Indian Territory	0	0	0	0	0	0	0	0	0	0	0	0	0
Iowa	1	8	3	1	2	2	1	4	3	6	3	2	36
Kansas	0	4	1	3	3	4	1	0	1	3	2	0	22
Kentucky	0	2	0	0	0	0	0	1	0	0	0	1	4
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0	0
Maine	4	8	8	10	4	1	1	3	6	2	3	4	54
Maryland	0	2	2	3	0	0	0	0	0	2	2	2	13
Massachusetts	2	9	5	4	7	0	7	5	6	3	8	4	60
Michigan	2	10	9	3	1	1	1	4	2	5	5	1	44
Minnesota	10	10	14	12	2	7	3	6	14	15	9	5	107
Mississippi	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri	1	0	1	0	1	0	0	0	1	2	3	0	9
Montana	2	10	5	8	1	0	3	2	8	13	9	5	66
Nebraska	1	6	3	2	1	3	1	0	1	5	4	4	31
Nevada	5	7	3	2	1	2	1	0	0	2	0	1	23
New Hampshire	3	13	8	9	2	9	3	6	6	3	5	3	70
New Jersey	2	3	1	1	2	2	0	0	0	5	5	2	23
New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	3	7	9	5	2	3	4	1	7	6	8	0	55
North Carolina	1	0	0	0	0	0	0	0	0	0	1	1	3
North Dakota	5	9	10	11	8	6	6	7	11	16	7	11	107
Ohio	5	10	3	2	4	5	2	2	5	9	5	0	59
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	1	0	0	0	0	1	0	0	0	2
Pennsylvania	3	4	0	3	1	0	0	0	0	4	0	1	16
Rhode Island	0	5	0	1	0	0	0	0	0	1	0	0	7
South Carolina	0	0	0	0	0	0	0	1	0	0	0	0	1
South Dakota	2	8	4	3	0	0	1	4	7	5	7	2	43
Tennessee	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermont	4	6	6	4	1	0	3	1	1	3	4	4	37
Virginia	2	0	1	0	1	0	0	0	0	0	0	1	5
Washington	1	5	4	6	6	7	3	1	3	4	3	0	43
West Virginia	0	0	0	0	0	0	0	0	1	0	0	0	1
Wisconsin	11	12	18	14	3	3	0	6	11	10	9	4	101
Wyoming	2	0	0	0	0	0	0	0	0	2	1	0	5

TABLE X.—*Total snowfall at Weather Bureau stations.*

Compiled by the Editor from data furnished by A. J. HENRY, Chief of Division of Records and Meteorological Data. The snowfall is given in inches for the respective snow years, July 1, 1884–June 30, 1885, etc.

Stations.	1884–85.	1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.
Alabama.											
Mobile	.....	.....	.....	.....	.....	.....	.....	.....	1.0	T.	6.0
Montgomery	3.0	T	12.7	T.	0	0	0	0	2.3	T.	3.2
Arizona.											
Fort Apache	18.9	5.6	7.1	27.5	0.8	.....	1.4	.....	.....	.....	.....
Fort Bowie	T.	2.9	0	10.0	0.8	0	0	.....	.....	.....	.....
Fort Grant	16.5	10.2	0.2	T.	18.5	0.2	0	.....	.....	.....	.....
Fort Thomas	0	2.1	0	T.	0	0	0	.....	.....	.....	.....
Prescott	0	21.0	14.7	34.5	31.8	14.3	.....	.....	.....	.....	.....
Tucson	.....	.....	.....	.....	.....	.....	.....	.....	0	4.7	0
Willcox	0	0	2.0	0	0	0	0	.....	.....	.....	.....
Arkansas.											
Fort Smith	0.3	11.8	3.2	0.4	2.0	0	5.1	9.2	10.8	9.3	12.5
Little Rock	2.0	0.7	2.1	11.1	1.5	T.	5.2	13.5	16.6	7.5	11.0
California.											
Fort Bidwell	3.5	71.9	86.0	71.4	.....	.....	.....	.....	.....	.....	.....
Keeler	.....	11.1	2.3	0.1	T.	0	1.3	0.9	6.8	8.0	.....
Red Bluff	0	0	0	0	0	0	0	2.5	0	2.0	T.
Sacramento	0	0	0	4.0	0	0	0	0	0	0	0
San Francisco	0	0	3.7	0.1	0	0	0	0	0	T.	0
Colorado.											
Colorado Springs	.....	.....	.....	5.7	9.4	43.6	.....	.....	.....	17.2	.....
Denver	49.7	34.6	32.1	25.5	21.3	38.5	76.6	52.3	57.4	51.9	37.0
Montrose	.....	19.0	29.8	13.1	14.5	18.3	22.5	51.2	57.3	.....	.....
Pikes Peak	.....	.....	.....	.....	.....	.....	.....	.....	751.0	331.4	.....
Pueblo	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.5	28.2
Connecticut.											
New Haven	29.6	21.1	39.4	64.8	14.4	26.4	30.5	30.6	74.2	65.8	47.7
New London	38.2	44.9	27.5	35.0	13.3	34.2	27.6	21.3	51.3	57.0	25.6
Delaware.											
Del. Breakwater	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dist. of Columbia.											
Washington	24.5	30.2	44.6	25.9	12.5	6.5	37.1	41.7	31.0	25.4	24.8
Florida.											
Jacksonville	.....	.....	.....	.....	.....	.....	.....	.....	T.	0	T.
Pensacola	.....	.....	1.5	.....	.....	.....	.....	0.5	T.	T.	3.0
Georgia.											
Atlanta	4.7	0.8	6.9	T.	7.5	0.1	1.0	1.3	10.6	6.0	13.2
Augusta	T.	T.	1.1	0	6.0	0.8	0	0.5	4.7	0	4.1
Savannah	0	T.	0	0	T.	T.	0	0	1.0	0	1.8
Idaho.											
Boise City	48.9	18.0	11.8	9.2	12.2	35.4	.....	.....	.....	.....	.....
Idaho Falls	.....	.....	.....	.....	.....	.....	.....	.....	72.3	45.9	29.1
Illinois.											
Cairo	7.1	23.7	7.3	7.4	8.1	2.5	8.2	28.7	22.4	11.1	27.4
Chicago	33.5	46.6	35.2	32.7	22.7	21.3	21.6	33.5	31.5	44.4	47.2
Springfield	40.5	30.8	12.7	9.6	18.7	20.0	9.7	30.0	12.0	25.5	12.7
Indiana.											
Indianapolis	37.5	26.5	24.9	6.4	16.2	11.5	32.1	18.0	36.0	9.7	29.9
Indian Territory.											
Fort Reno	.....	14.7	T.	4.8	7.5	0	0.8	.....	.....	.....	.....
Fort Sill	4.8	3.4	0.6	1.2	1.6	T.	3.0	.....	.....	.....	.....
Fort Supply	.....	39.6	3.0	5.9	6.5	6.7	.....	.....	.....	.....	.....
Iowa.											
Davenport	40.3	41.2	27.6	47.1	19.7	14.8	20.3	21.4	41.3	28.8	16.3
Des Moines	41.7	70.9	46.9	27.4	21.3	32.7	28.4	31.9	31.0	43.5	24.4
Dubuque	38.8	56.3	63.2	57.0	24.6	30.0	43.5	29.5	51.5	41.9	21.0
Keokuk	55.8	54.7	33.5	22.6	20.5	20.1	17.1	19.1	28.5	24.0	18.8
Sioux City	.....	.....	.....	.....	.....	50.8	42.3	27.2	22.1	17.2	11.1
Kansas.											
Concordia	.....	47.3	5.8	14.4	14.0	19.0	28.5	16.5	19.2	16.8	12.3
Dodge City	13.8	17.1	11.2	13.6	4.4	14.5	33.2	21.8	16.5	14.4	27.2
Kansas.											
Leavenworth	26.9	23.7	26.6	25.2	20.0	17.6	27.3	21.0	35.2	.....	.....
Topeka	.....	.....	.....	9.2	17.3	4.2	5.7	13.1	34.0	9.5	10.0
Wichita	.....	.....	.....	.....	16.9	15.4	15.0	11.8	18.7	12.9	15.0
Kentucky.											
Lexington	.....	.....	.....	.....	11.8	25.7	10.3	21.5	30.7	29.9	34.1
Louisville	11.9	22.3	21.9	10.7	1.9	6.5	8.5	13.3	16.8	12.6	38.1
Louisiana.											
Shreveport	3.7	T.	2.7	1.3	0	0	0	5.0	T.	3.2	1.8
Maine.											
Eastport	54.1	35.1	80.0	75.1	52.1	64.1	50.5	50.1	40.9	61.3	54.0
Portland	56.9	56.2	121.0	82.0	33.4	50.9	72.6	40.0	87.2	99.6	45.8
Maryland.											
Baltimore	31.4	30.3	25.6	32.1	9.0	4.9	35.9	44.3	30.3	21.0	17.9
Massachusetts.											
Boston	28.0	40.5	73.0	34.7	19.0	38.9	58.3	43.5	67.3	64.0	46.9
Edgartown	.....	.....	25.5	14.9	.....	.....	.....	.....	.....	.....	.....
Nantucket	.....	.....	16.4	11.2	18.5	26.5	14.6	15.5	33.6	19.8	27.8
Vineyard Haven	.....	.....	.....	.....	.....	.....	.....	.....	54.7	32.3	26.2
Woods Hole	.....	.....	.....	.....	.....	31.0	24.8	24.8	67.1	71.1	42.9
Michigan.											
Alpena	106.8	116.7	146.1	122.8	70.0	110.6	65.1	34.2	59.9	70.4	51.7
Detroit	56.5	58.9	60.5	39.0	24.3	15.7	27.0	39.4	59.7	45.5	43.6
Escanaba	68.7	95.8	51.1	83.9	.....	.....	.....	.....	76.0	51.6	.....
Grand Haven	68.1	54.2	53.9	45.7	36.8	44.3	37.9	48.2	66.7	60.2	48.4
Lansing	.....	.....	.....	47.4	37.8	23.0	38.0	.....	.....	.....	.....
Mackinaw City	108.2	88.6	81.2	74.3	.....	.....	.....	.....	.....	.....	.....
Manistee	.....	.....	.....	.....	.....	.....	.....	.....	65.6	.....	.....
Marquette	142.1	83.4	110.2	137.0	125.3	144.1	190.2	128.7	137.0	180.3	115.2
Port Huron	44.5	43.1	38.4	30.7	54.4	32.9	48.9	41.8	56.6	42.1	31.3
Minnesota.											
Duluth	45.7	69.9	76.8	76.2	41.0	59.2	74.6	48.6	75.2	80.2	30.3
Minneapolis	.....	.....	.....	.....	.....	.....	.....	.....	59.1	49.9	16.2
Moorhead	20.2	27.3	50.1	51.4	26.4	14.2	43.7	31.0	71.1	55.5	14.1
Red Wing	.....	.....	.....	.....	.....	.....	.....	16.5	66.3	.....	.....
St. Paul	32.3	30.4	61.7	46.2	14.4	36.3	32.7	28.5	60.6	40.7	19.8
St. Vincent	40.2	41.6	32.5	31.7	34.3	68.4	15.5	42.9	49.5	38.0	23.8
Mississippi.											
Meridian	.....	.....	.....	.....	.....	.....	.....	.....	2.1	T.	2.9
University	.....	.....	.....	0.7	0.2	0.5	1.5	5.6	13.6	.....	.....
Vicksburg	.....	.....	7.4	5.4	0.1	0	T.	5.0	3.4	T.	2.8

TABLE X.—*Total snowfall at Weather Bureau Stations.*—Continued.

Stations.	1884–85.	1885–86.	1886–87.	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.
Montana.											
Assiniboine	24.5	47.9	46.4	47.9	20.5	42.0	33.5	23.8	.....	.....	.....
Havre	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.1	32.9	33.4
Fort Benton	43.4	28.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Custer	109.1	89.1	34.0	20.5	14.4	29.1	23.4	.....	.....	.....	.....	.....
Helena	54.0	28.5	59.4	57.1	34.0	43.1	79.5	46.1	48.9	48.8	52.1
Fort Maginnis	7.0	60.8	78.9	141.5	66.5	.....	.....	.....	.....	.....	.....	.....
Miles City	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.6	60.5	17.9
Poplar River	29.9	26.4	41.7	35.8	10.6	.....	.....	.....	.....	.....	.....	.....
Fort Shaw	66.1	34.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missouri.											
Columbia	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.3	14.3	24.5
Hannibal	.....	.....	.....	.....	.....	.....	.....	.....	.....	15.8	16.3	20.6
Kansas City	.....	.....	.....	.....	10.1	14.3	26.3	20.6	33.3	24.5	13.7
Lamar	.....	33.4	9.0	6.2	.....	.....	.....	.....	.....	.....	.....	.....
Springfield	.....	.....	.....	12.0	14.5	3.5	21.0	19.0	14.5	19.5	25.7
St. Louis	24.6	22.4	19.2	8.4	12.7	32.5	18.6	16.0	14.2	8.7	20.9
Nebraska.											
Crete	.....	.....	.....	14.2	20.2	21.5	32.3	32.2	22.8	.....	.....
North Platte	9.7	51.4	53.8	42.4	15.1	10.7	40.3	29.2	17.2	26.4	10.2
Omaha	18.0	30.3	32.9	22.3	15.8	23.9	30.5	20.5	34.7	21.1	16.3
Kearney	.....	.....	.....	.....	.....	.....	.....	.....	.....	26.9	23.8	.....
Valentine	.....	38.6	40.8	26.2	34.7	45.1	57.7	70.9	33.4	36.9	.....
Nevada.											
Carson City	.....	.....	.....	22.4	13.7	118.4	37.0	26.0	60.8	41.0	27.7
Winnemucca	.....	18.7	35.2	24.3	10.9	75.0	21.4	33.8	52.3	28.4	45.9
New Hampshire.											
Manchester	.....	.....	.....	90.7	45.8	79.9	85.8	54.1	78.5	.....	.....
New Jersey.											
Atlantic City	24.5	30.0	19.0	21.5	10.3	8.8	8.7	5.4	34.0	8.7	.....
Cape May	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Brunswick	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.1	27.8	25.1
Sandy Hook	.....	40.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico.											
Santa Fe	40.2	35.9	18.6	14.6	30.4	18.1	41.2	36.4	12.9	28.2	42.7
Fort Stanton	.....	7.4	13.2	56.5	21.0	12.4	20.2	16.6	35.1	.....	.....
New York.											
Albany	56.3	39.9	95.0	110.0	29.4	27.0	67.9	26.2	57.6	55.7	68.4
Buffalo	64.0	114.6	88.3	53.5	70.9	19.6	55.8	79.9	74.3	89.9	73.7
New York	36.6	23.9	49.5	47.1	21.9	34.1	39.5	36.5	67.0	56.1	36.2
Oswego	97.2	54.5	125.7	102.0	92.1	51.7	68.7	96.1	80.9	86.5	80.0
Rochester	90.3	64.7	72.6	48.7	82.2	65.8	83.5	77.0	96.5	102.2	90.3
North Carolina.											
Charlotte	11.7	3.5	6.0	T.	8.0	1.0	T.	2.0	19.0	7.2	17.7
Hatteras	0	0	0	0	0	0.5	0	T.	T.	T.	10.3
Kittyhawk	0.2	1.0	0	T.	0	0	0	4.0	17.0	0.7	7.9
Raleigh	0	0	0	0.1	10.7	1.3	0.7	4.6	31.6	6.0	14.3
Southport	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.1	4.8	..
Wilmington	0	0.2	0.2	0	2.5	0	0	0	2.0	3.2	0.5
North Dakota.											
Bismarck	34.1	34.2	45.7	33.1	37.3	25.7	26.6	47.7	39.1	42.3	14.9
Fort Buford	29.6	35.2	33.3	51.8	12.0	31.0	12.7	33.3	60.7	70.6	.....
Fort Totten	41.7	38.9	31.8	24.1	.....	.....	.....	.....	.....	.....	.....
Fort Yates	5.0	42.8	90.8	79.3	4.0	0.6	2.2	.....	.....	.....	.....
Ohio.											
Cincinnati	31.1	20.5	6.8	10.9	9.3	7.4	16.0	15.7	29.8	18.9	36.0
Cleveland	32.6	21.0	39.7	33.3	23.3	14.9	20.9	44.5	40.5	47.4	22.7
Columbus	20.9	34.7	31.9	21.3	16.3	21.4	33.9	18.8	38.1	19.3	44.8
Sandusky	51.8	28.9	44.0	22.0	19.7	8.2	22.1	22.6	58.9	38.0	24.5
Toledo	44.6	41.7	44.8	30.5	25.0	6.4	32.0	30.3	31.8	35.5	35.0
Oklahoma.											
Oklahoma City	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.1	7.9	9.3
Oregon.											
Ashland	5.1	4.7	26.9	9.0	.....	.....	.....	.....	.....	.....	.....	.....
Astoria	0	6.0	17.5	7.0	0	25.0	2.0	1.0	31.3	15.5	3.8
Baker City	.....	.....	.....	.....	.....	51.9	54.4	59.2	49.9	66.5	53.1
Fort Klamath	.....	98.0	113.0	91.9	.....	.....	.....	.....	.....	.....	.....
Lakeview	7.9	31.0	62.7	47.7	.....	.....	.....	.....	.....	.....	.....
Linkville	.....	43.4	60.3	54.8	.....	.....	.....	.....	.....	.....	.....
Portland	35.6	9.3	18.2	14.0	1.3	41.6	13.0	0.7	60.9	16.5	30.4
Roseburg	0.5	0.7	34.2	17.2	1.8	12.4	3.6	0	17.7	16.1	1.5
Pennsylvania.											
Erie	97.1	72.1	83.5	54.2	34.0	15.5	38.7	43.5	65.1	59.7	49.8
Harrisburg	.....	.....	.....	.....	.....	.....	.....	.....	52.1	55.1	33.5
Philadelphia	23.8	21.4	25.0	30.0	6.2	7.4	15.2	19.9	36.8	30.3	22.8
Pittsburg	38.7	39.5	38.2	17.8	28.6	11.4	56.4	28.1	42.3	30.0	34.5
Rhode Island.											
Block Island	18.1	23.7	43.9	8.9	1.8	5.9	5.3	12.2	30.2	19.3	25.0
Narragansett Pier	3.0	28.5	52.5	22.5	8.0	26.5	22.0	26.2	50.0	40.0	22.6
South Carolina.											
Charleston	0	0	0	0	0	T.	0	T.	1.9	T.	T.
Columbia	.....	.....	.....	.....	.....	.....	.....	.....	2.0	11.3	15.6
South Dakota.											
Deadwood	98.3	105.1	173.9	.....	.....	.....	.....	.....	.....	.....	.....
Fort Sully	.....	27.7	2.0	21.6	23.1	18.3	26.2	.....	.....	.....	.....
Huron	8.3	10.6	24.2	35.0	27.4	24.5	39.4	26.2	34.5	31.9	16.1
Pierre	.....	.....	.....	.....	.....	.....	.....	.....	29.9	25.5	25.6
Rapid City	.....	.....	.....	.....	40.4	30.9	34.7	50.9	22.3	27.5	22.6
Yankton	20.6	48.4	42.3	47.8	10.2	28.3	38.5	33.6	24.8	20.0	.....
Tennessee.											
Chattanooga	6.4	2.6	15.2	0.5	0.5	1.2	8.1	12.0	16.1	11.6	22.1
Knoxville	10.0	12.9	27.4	3.6	2.5	1.5	7.7	5.4	11.1	9.0	41.6
Memphis	1.1	13.9	7.4	5.9	0.9	0.7	3.5	24.5	12.1	9.0	15.6
Nashville	0.4	26.5	4.6	11.2	3.2	5.0	2.6	21.8	7.9	12.4	27.7
Texas.											
Abilene	.....	0.1	T.	11.6	4.1	9.7	4.5	2.6	0.9	1.3	13.2
Amarillo	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.4	36.6
Brownsville	0	0	0	T.	0	0	0	0	0	0	0
Corpus Christi	.....	.....	.....	1.2	0	0	0	T.	0	0	4.3
El Paso	1.5	0	0	4.0	4.0	5.4	8.0	0	5.6	T.	2.6
Fort Davis	2.1	1.9	0	6.0	.....	.....	.....	.....	.....	.....	.....
Fort Elliott	12.8	12.6	0.2	4.3	9.3	7.2	.....	.....	.....	.....	.....
Galveston	0	6.0	0	1.5	0	0	0	0	0	0	15.4
Palestine	4.6	0.9	4.3	9.2	T.	0	T.	2.9	1.0	1.8	6.0
San Antonio	0	0.5	0	1.5	0	0	0	0	0	0	4.2
Utah.											
Fort Du Chesne	.....	.....	.....	10.1	15.1	16.8	14.8	.....	.....	.....	.....

TABLE X.—*Total snowfall at Weather Bureau stations*—Continued.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Utah—Cont'd.											
Frisco	.....	18.7	50.2	.....	.....	.....	.....	.....	.....	.....	.....
Salt Lake City	38.4	33.6	79.6	71.9	18.0	65.8	24.5	48.4	69.5	55.4	31.9
Vermont.											
Northfield	.....	.....	.....	191.2	88.2	56.8	92.7	50.3	63.0	85.3	88.1
Virginia.											
Cape Henry	6.4	3.5	7.0	4.0	2.0	2.5	T.	5.0	31.0	T.	7.0
Chincoteague	18.9	19.4	12.5	.....	.....	.....	.....	.....	.....	.....	.....
Lynchburg	18.4	28.0	28.7	6.6	19.7	6.0	28.3	29.6	15.3	14.9	45.4
Norfolk	12.7	4.0	14.6	2.5	2.0	3.6	1.0	6.7	33.3	7.4	14.6
Washington.											
East Clallam	.....	.....	.....	.....	.....	.....	.....	.....	1.2	25.0	20.5
Fort Canby	.....	.....	.....	.....	.....	24.0	0.9	0.0	17.9	14.9	1.5
Fort Spokane	0	9.3	34.3	.....	.....	.....	.....	.....	.....	.....	.....
Neah Bay	.....	.....	.....	.....	.....	.....	.....	.....	14.5	15.1	12.5
Olympia	0	9.5	8.3	10.5	0	20.0	6.5	1.8	40.3	21.5	17.0
Port Angeles	26.9	16.6	56.2	9.7	1.5	40.0	0	5.2	75.1	23.9	15.0
Port Crescent	.....	.....	.....	.....	.....	.....	.....	.....	50.7	29.9	.....
Spokane Falls	48.1	17.6	36.7	42.8	22.1	79.1	30.1	38.5	67.3	49.8	37.7
Tatoosh Island	9.7	0	25.8	9.2	3.6	0	0.8	0	35.8	5.4	5.9
Walla Walla	.....	.....	39.5	23.2	5.9	47.0	20.3	16.2	29.6	30.6	18.8
West Virginia.											
Parkersburg	.....	.....	.....	.....	15.3	10.2	15.7	47.4	47.7	41.1	43.9
Wisconsin.											
Green Bay	.....	.....	83.7	125.2	76.9	100.6	70.3	45.2	70.0	72.2	35.5
La Crosse	35.7	61.6	28.3	41.8	26.4	28.1	55.8	21.1	56.6	39.0	30.5
Milwaukee	11.3	109.8	74.1	51.5	28.9	39.8	40.8	33.8	37.4	40.5	40.4
Wyoming.											
Cheyenne	25.8	19.0	26.5	31.5	35.2	58.9	64.5	68.6	55.9	37.1	35.9
Fort Bridger	13.3	40.4	57.5	35.4	.....	.....	.....	.....	.....	.....	.....
Fort McKinney	.....	.....	.....	.....	19.8	36.5	61.7	.....	.....	.....	.....
Fort Washakie	.....	.....	.....	.....	29.1	32.7	27.1	.....	...	.....	.....
Lander	.....	.....	.....	.....	.....	.....	.....	55.2	81.1	64.1	27.5

TABLE XI.—*Total snowfall at Canadian stations.*

Compiled by the Editor from data furnished by Prof. R. F. Stupart, director of the Meteorological Service, Dominion of Canada. The snowfall is given in inches for the respective snow years, July 1, 1884–June 30, 1885, etc.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Denbigh, Ont.	126.3	117.9	93.0	91.5	66.5	114.5	88.1	70.5	107.9	97.1	80.5
Scarboro, Ont.	49.8	52.3	86.4	33.5	44.5	27.4	44.7	41.3	48.3	37.3	41.3
Fredericton, N. B.	134.6	107.0	172.2	77.4	84.6	103.2	121.4	94.6	88.8	119.1	98.5
Chicoutimi, Que.	52.0	93.0	93.3	82.9	69.5	54.9	59.5	34.0	47.2	71.6	59.7
Cowal, Ont	62.7	45.3	76.4	33.2	48.3	19.5	47.8	31.5	79.5	27.6	44.0
St. George, Ont.	72.0	79.0	83.3	42.0	58.7	40.7	46.0	45.7	55.9	45.7	67.6
Sunshine, Ont.	76.8	95.7	179.8	90.5	107.7	38.8	75.6	69.8	97.3	91.6	95.3
Thedford, Ont.	75.3	68.5	92.5	40.0	77.5	37.5	57.5	63.5	106.3	46.0	72.0
St. Johns, N. F.	129.7	72.0	74.5	95.0	62.6	98.0	109.2	59.4	135.6	227.0	67.3
Bird Rocks, Que.	25.3	24.3	56.6	32.6	49.8	32.0	86.0	49.1	59.7	151.9	97.9
Regina, Assin.	40.0	12.0	10.5	30.1	20.3	28.3	21.4	30.8	33.8	26.0	16.5
Nicola Lake, B. C.	34.4	34.2	27.0	44.4	25.0	41.8	18.8	21.0	.....	.....	18.0
Presque Isle, Ont.	157.8	108.8	129.1	114.8	101.0	76.1	94.4	106.0	129.0	158.9	163.8
Goderich, Ont.	142.2	133.2	92.5	94.5	97.0	57.5	98.0	56.0	102.5	75.5	97.0

TABLE XI.—*Total snowfall at Canadian stations*—Continued.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Sarnia, Ont.	63.3	47.5	27.9	36.8	41.7	21.5	35.5	60.0	68.5	27.1	33.0
Princeton, Ont.	63.5	69.0	67.0	62.6	61.8	37.7	41.7	49.0	74.0	49.0	74.3
Cottam, Ont.	64.2	51.6	54.0	32.7	38.2	17.4	37.4	36.4	70.8	45.4	32.5
Wilton Grove, Ont.	64.4	44.0	54.9	33.7	38.5	.....	.....	34.0	67.0	30.0	27.0
Aurora, Ont	46.5	61.2	61.6	48.4	48.7	58.1	60.3	51.1	56.2	55.8	65.0
Birnam, Ont.	120.1	99.0	112.6	74.2	90.8	40.2	75.2	79.9	139.1	52.8	79.6
Brome, Que	55.0	53.0	90.8	.....	70.5	38.0	62.0	48.5	86.0	.....	51.0
Richmond, Que	115.4	93.8	171.4	143.5	108.6	96.9	127.7	92.2	94.2	95.3	84.5
C. Magdalene, Que	150.0	116.5	152.0	133.5	145.5	143.5	135.0	123.0	96.0	108.0	107.0
Montreal, Que	164.4	110.7	174.3	154.8	124.5	103.0	104.2	134.9	92.4	83.1	89.2
Dalhousie, N. B.	157.2	121.0	147.0	143.0	111.0	159.5	111.3	78.5	97.9	105.2	90.0
Orillia, Ont.	147.7	104.5	131.4	118.1	117.1	90.9	126.3	87.4	109.8	114.3	100.6
Point Clark, Ont.	97.0	111.0	119.0	78.0	96.0	33.0	30.0	51.0	93.0	75.0	116.0
St. John, N. B.	121.1	90.6	113.9	60.8	51.9	71.8	92.7	53.5	79.4	113.2	77.7
Clontarf, Ont.	104.9	127.1	121.1	111.6	68.3	110.4	105.1	82.0	105.4	97.3	87.5
Ottawa, Ont.	120.7	115.3	182.4	99.1	54.5	61.6	85.9	98.8	92.4	94.5	90.9
Woodstock, Ont.	75.8	49.7	101.6	60.5	98.9	48.9	70.4	65.4	32.2	34.5	64.8
Truro, N. S.	121.3	55.9	87.1	62.4	37.9	62.4	108.6	73.2	96.8	131.4	99.1
Stoney Creek, Ont.	58.0	39.0	65.0	40.0	55.3	24.0	52.2	48.0	67.0	58.0	51.6
Durham, Ont.	213.0	157.0	149.0	122.0	28.2	101.0	184.0	81.0	145.0	179.0	185.9
Gravenhurst, Ont.	.....	89.0	125.8	123.6	88.5	83.5	89.0	66.8	105.7	94.1	94.5
Bala, Ont.	160.8	96.5	145.9	99.1	77.3	69.5	81.4	70.3	107.7	109.5	124.1
Paris, Ont	53.7	50.9	60.7	27.8	42.8	21.5	35.1	38.0	51.3	47.5	56.3
London, Middlesex	129.5	133.4	111.4	67.4	107.5	62.6	88.1	56.4	89.5	49.9	66.5
Esquimalt, B. C.	16.0	14.5	25.0	8.8	.....	4.2	11.4	1.0	57.6	42.9	28.4
Haliburton, Ont.	97.4	84.9	74.4	91.4	56.5	73.8	59.3	61.2	65.3	76.3	64.3
Deseronto, Ont.	83.6	70.7	90.8	39.9	60.8	55.9	60.0	54.6	67.3	71.9	73.0
Lindsay, Ont.	101.4	101.8	129.7	95.4	79.4	84.8	100.4	88.6	90.9	100.1	94.4
Barrie, Ont.	88.2	83.3	94.7	97.6	84.1	63.4	90.6	82.6	91.2	112.8	138.2
Edmonton, Alb.	35.0	53.3	22.1	47.8	9.2	31.3	27.2	29.2	45.6	49.6	46.0
Owen Sound, Ont.	170.8	88.5	134.0	89.5	93.1	102.3	98.1	105.7	147.0	125.5	144.4
Swift Current, As'n	.....	.....	45.7	39.0	36.7	44.4	41.4	77.7	84.2	45.1	26.0
White River, Ont.	.....	.....	.....	.....	.....	158.8	30.4	21.1	112.3	84.0	80.2
Winnipeg, Man.	47.6	37.4	46.1	55.6	49.3	61.8	28.8	51.8	71.3	76.5	54.0
Calgary, Alberta.	.....	.....	37.4	52.7	54.0	50.6	22.5	12.0	34.2	43.2	40.7
Medicine Hat, As'n	23.9	.....	14.4	31.0	12.3	24.0	27.7	29.6	54.9	48.0	26.0
Port Arthur, Ont.	51.6	47.7	46.6	84.3	36.1	56.4	26.0	27.8	65.7	43.3	42.3
Minnedosa, Man.	48.7	40.6	28.9	46.1	35.0	48.5	39.3	25.4	52.6	63.1	32.6
Qu'Appelle, Assin.	48.9	40.2	28.6	41.0	28.4	77.2	37.2	39.5	49.5	49.7	45.0
St. Andrews, N. B.	113.1	99.6	130.0	89.4	85.9	74.9	105.2	86.4	85.4	124.6	91.8
Yarmouth, N. S.	121.8	89.0	117.3	95.9	50.7	76.9	68.0	82.8	116.9	87.5	79.7
Grand Manan, N. B.	59.0	36.3	76.1	71.7	79.2	45.1	69.3	56.9	64.7	92.6	79.2
S.W.P. Anticosti, Q.	69.1	70.3	104.7	109.8	66.0	80.7	94.9	86.5	68.0	75.2	100.5
Halifax, N. S.	99.7	65.0	85.5	66.2	80.0	59.7	69.2	83.6	116.7	119.8	80.6
Sydney, N. S.	106.7	73.6	87.2	81.5	47.9	67.4	80.2	63.3	.....	.....	77.9
Father Point, Que.	138.4	155.6	143.7	148.5	144.3	101.2	144.2	110.5	98.7	89.9	98.7
Chatham, N. B.	168.0	138.3	183.0	112.9	124.6	163.3	123.3	90.6	97.9	105.8	108.0
Rockliffe, Ont.	111.7	103.8	93.3	102.3	70.9	70.8	118.7	59.3	82.0	89.1	80.0
Quebec, Que.	187.0	116.8	155.1	175.6	151.6	132.9	121.7	84.4	74.0	147.1	86.0
Port Stanley, Ont.	64.8	86.7	56.9	51.6	61.2	31.1	76.4	56.6	114.5	54.4	74.3
Kingston, Ont.	117.6	103.8	116.2	77.9	82.2	69.7	70.3	65.6	68.8	68.5	63.6
Parry Sound, Ont.	115.6	101.9	118.4	123.4	71.4	94.0	108.0	124.1	130.0	160.5	178.0
Sangeen, Ont.	159.9	112.9	149.3	129.7	110.9	92.8	105.4	111.2	147.9	125.0	156.2
Dealtown, Ont.	48.4	47.4	29.6	30.3	18.3	6.8	23.8	22.4	48.5	27.0	14.9
Blenheim, Ont.	52.3	64.5	55.0	44.0	33.5	13.5	47.1	34.5	116.5	37.5	45.5
Orangeville, Ont.	77.4	69.0	91.1	97.4	77.0	55.0	82.6	58.9	130.7	90.0	88.0
Sprucedale, Ont.	147.9	82.1	122.0	120.0	63.9	91.0	77.3	76.6	107.0	105.0	101.0
Olivers Ferry, Ont.	85.8	58.8	90.9	38.3	34.8	56.2	48.3	47.0	41.0	41.0	50.6
Ennismore, Ont.	75.2	75.0	85.8	63.3	56.0	68.0	58.0	39.5	58.0	56.5	54.0

Chart I. Mean Annual Station Temperature, Barometer, and Resultant Winds for 1895.

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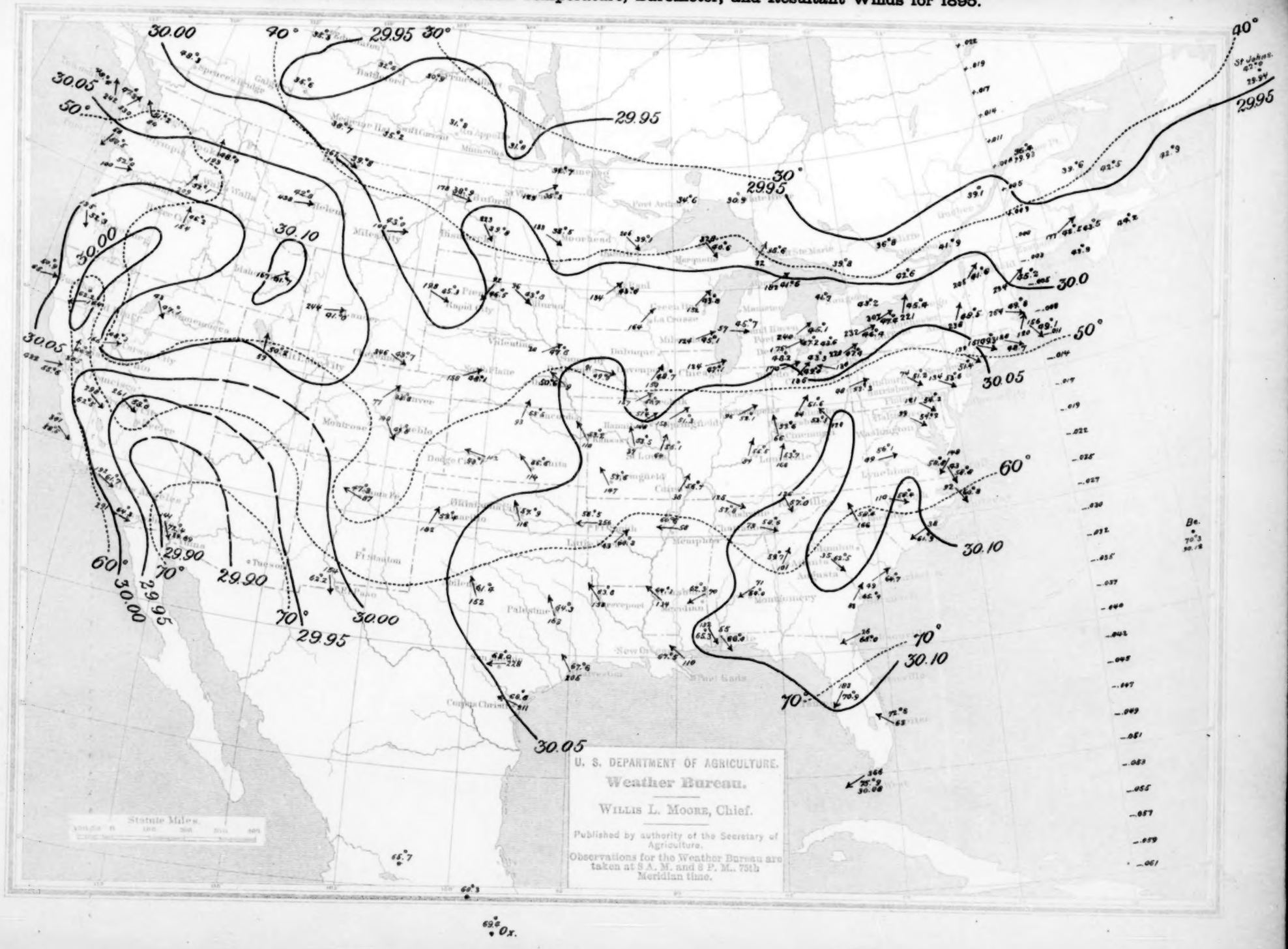
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Statute Miles.

Chart II. Annual Maxima and Minima of Surface Temperatures for 1895.

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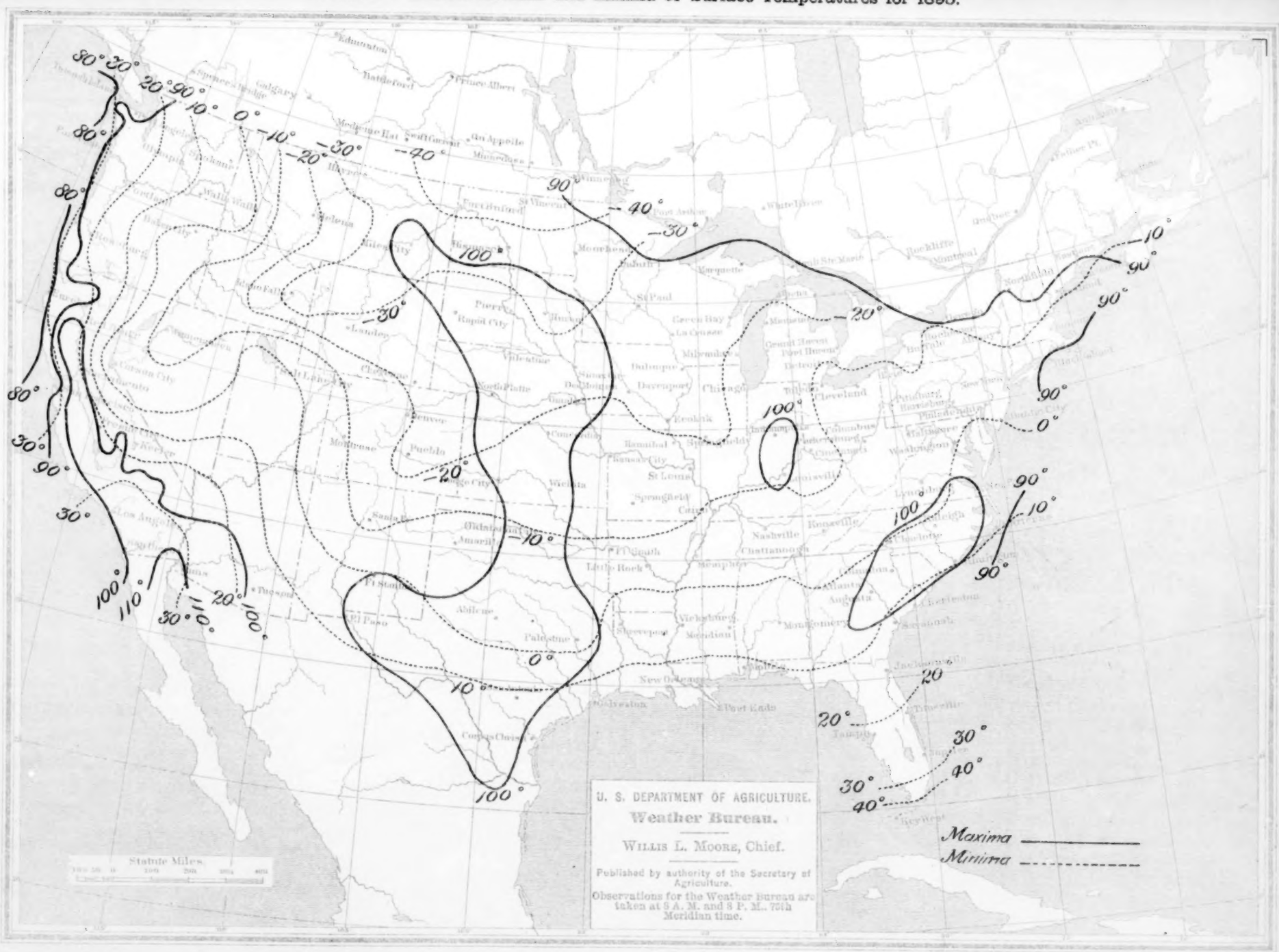
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Maxima
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Chart III. Total Annual Precipitation, 1895.

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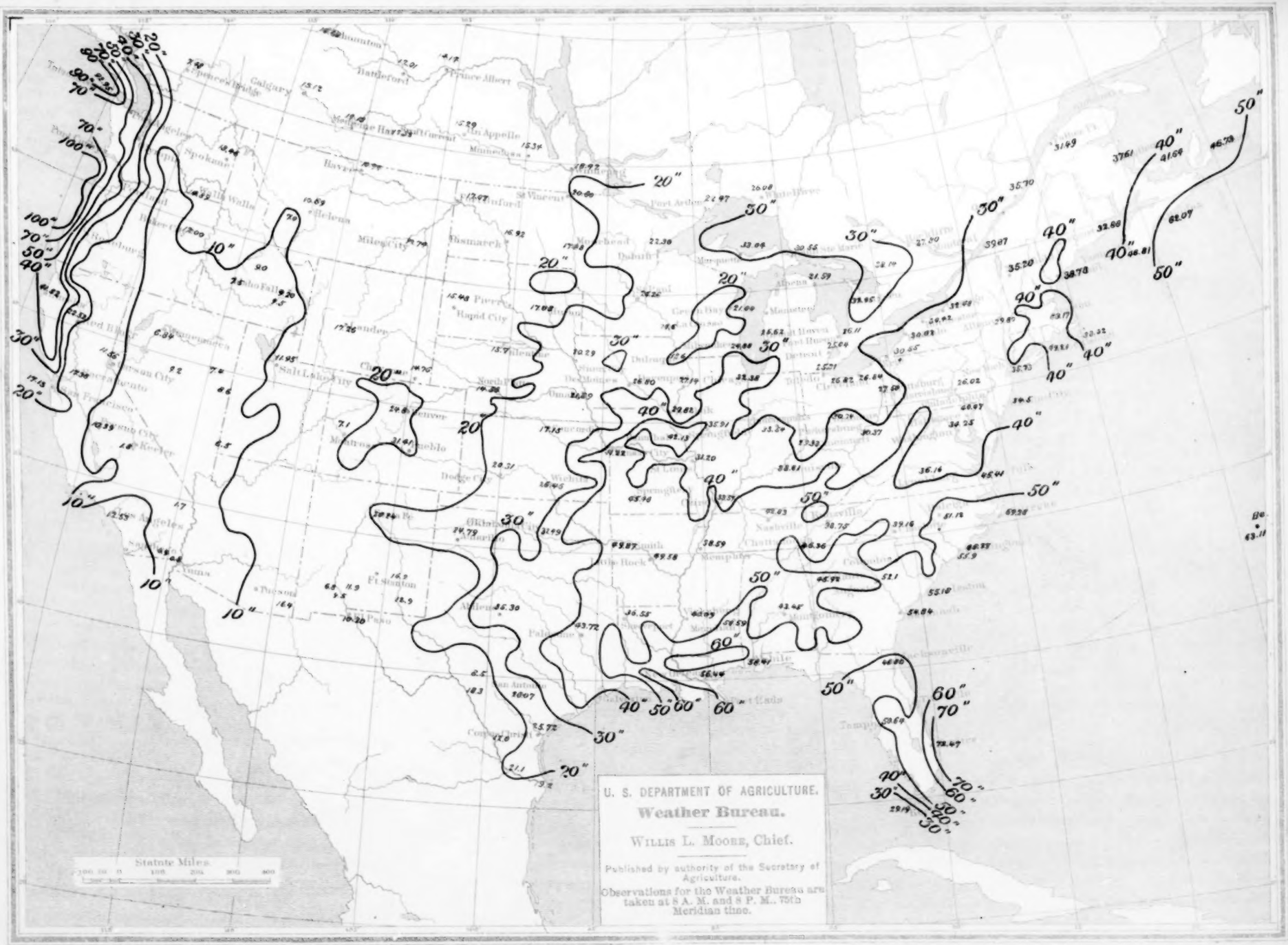
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Chart IV. Sea-Level Temperatures and Pressures for 1895; by Park Morrill.

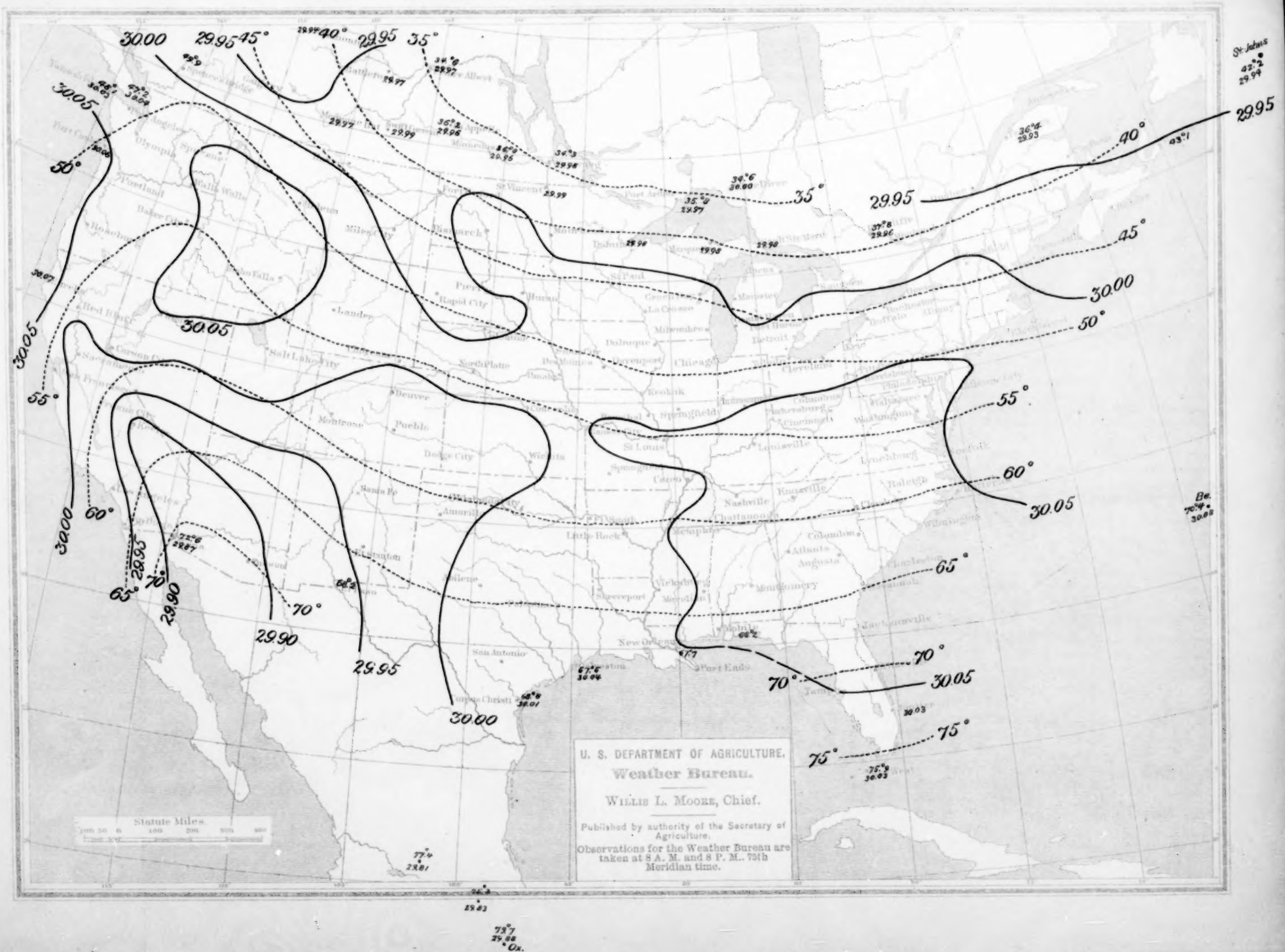
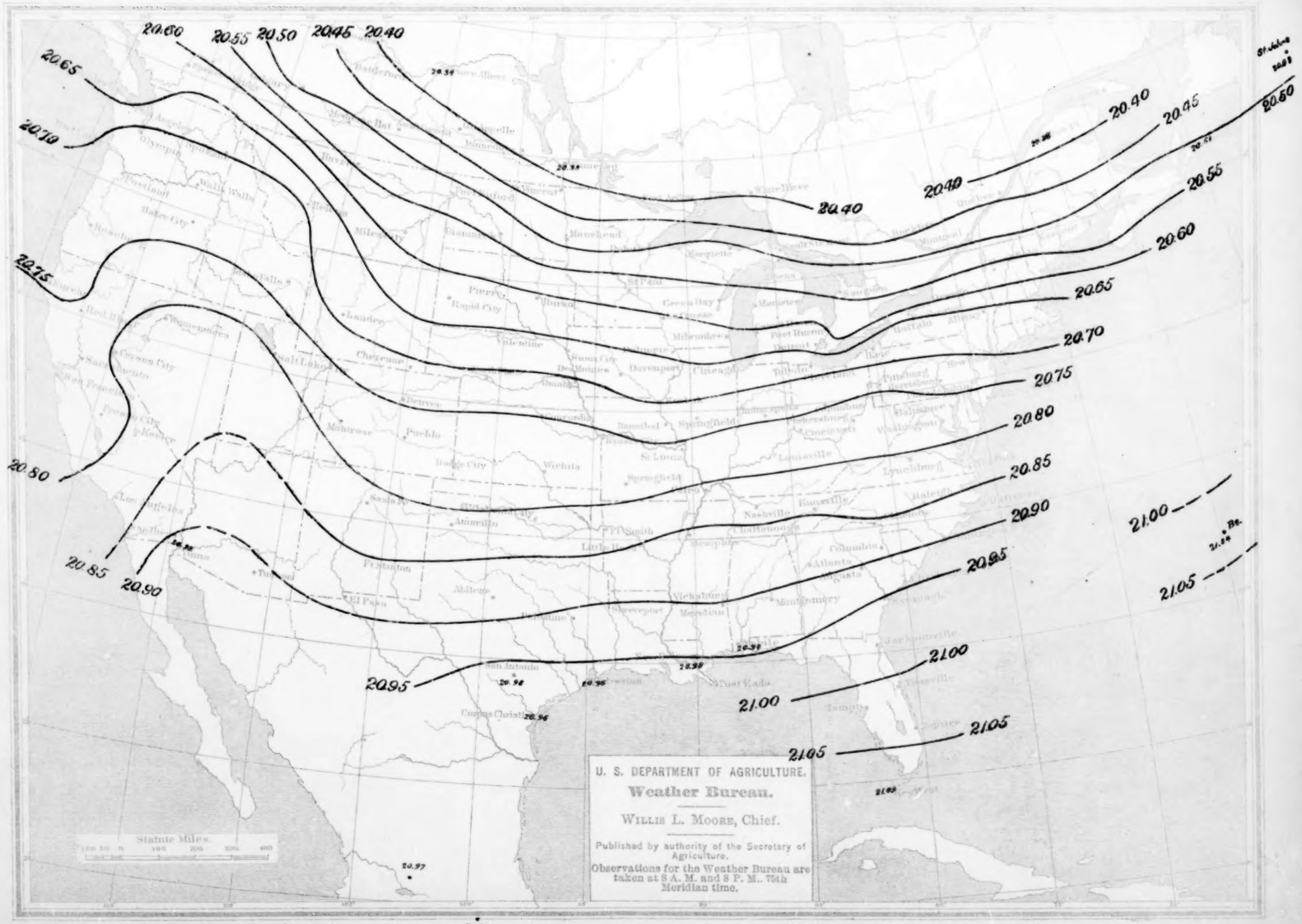


Chart V. High-Level Pressures (10,000 feet) for 1895; by Park Morrill.



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PROF. CLEVELAND ABBE, EDITOR.

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